

# BUTANE-PROPANE

HEADQUARTERS FOR LP-  
INFORMATION SINCE 1

190-34  
1938 U.S. BUREAU OF MINES INT'L BLDG  
1019 25TH & MICHIGAN AVES. N.W.  
U.S. BUREAU OF MINES INT'L BLDG

SCAIFE—Light and Durable  
the exclusive SCAIFE INFO-CROWN

CYLINDER DATA

You can read easily



**Scaife Company**

Oakmont (Pittsburgh District), Pa.

# THE VOTES ARE IN



## IT'S HACKNEY 3 to 1

Hackney is the preferred cylinder! Yes, this completely impartial, nation-wide survey left no doubt about it. Hackney Cylinders led their nearest competitor by more than 3 to 1. They had more than a 1 to 1 advantage over the rest of the industry combined.

This survey was among L-P Gas Dealers and distributors from coast to coast . . . you men who really know cylinders! You handle cylinders all the time, fill them, deliver them and maintain them. There's

no fooling you about the practical advantages of light weight, ease of handling, rugged strength, easy maintenance—top reasons why you said you preferred Hackney.

And you know Pressed Steel Tank Company and its reputation for top quality—for reputation of maker was a mighty important factor in getting out the vote for Hackney.

The constant progress which has marked Hackney Cylinders will continue—and will continue to make a great cylinder greater than ever!

*Write for full details on Hackney L-P Gas Cylinders.*

## RESSED STEEL TANK COMPANY

*Manufacturers of Hackney Products*

**Main Office and Plant:** 1487 South 66th St., Milwaukee 14, Wis.  
1399 Vanderbilt Concourse Bldg., New York 17, N. Y.  
227 Hanna Bldg., Cleveland 15, Ohio  
936 West Peachtree St., N.W., Atlanta, Georgia  
208 S. LaSalle Street, Room 2069, Chicago 4, Illinois  
552 Roosevelt Bldg., Los Angeles 14, California



Atlanta  
Houston  
Pittsburgh

JUST REMOVE 12 CAP SCREWS . . .

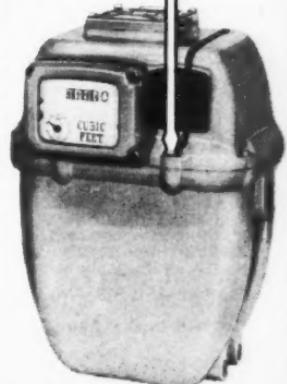
TO COMPLETELY RENEW A  
**ROCKWELL-EMCO**  
**No. 00 LP-Gas Meter**

A METER REPAIR PLAN  
TAILORED TO YOUR NEEDS



Illustrating how entire working mechanism lifts from body for economical unit replacement.

Don't shun meters because of the repair problem. We've solved that for you. After a period of years, the complete measuring mechanism of the No. 00 meter can be removed and replaced as a unit with either a new assembly or a factory repaired duplicate. Only a screw driver is needed to make your meters as good as new again. You have the option of returning worn internal units or complete meters to the factory for economical repairs. Write now for a schedule of repair prices and a copy of bulletin 1163 that describes in detail the advantages of using these lightweight, compact meters on all your services.



**Pittsburgh Equitable Meter Division**  
**ROCKWELL MANUFACTURING COMPANY**

Pittsburgh, Pa.

Atlanta  
Houston  
Pittsburgh

Boston  
Kansas City  
San Francisco



Chicago  
Los Angeles  
Seattle

Columbus  
New York  
Tulsa

No. 00 meter with tapped thread side connections illustrated. Male threaded top connection model also available.



Letters .....	25
Comment .....	29
Beyond the Mains.....	Ed Titus 31
What Happened in 1949.....	K. W. Rugh and E. O. Mattocks 35
How to Save Money on Your Tax Returns.....	Harold J. Ashe 39
"Veteran" Dredge Goes LP-Gas".....	Sid Pexton 42
The Customer Reads the Meter.....	44
Dairy Sterilizer Builds Good Will.....	46
Sell Safe Practices to Small Industry, Part 2.....	Lester L. Luxon 47
Mid-Continent Joint Processing Plant Will Extract LP-Gas.....	54
What's the Matter With the LP-Gas Business? .....	Robert N. Cary 58
Demonstrations Best Way to Sales.....	Minnette Lake Warren 67
Heat Radiation in Brooder Houses.....	Craig Espy 72
Serving Customer Interests.....	O. D. Hall 78
The Lost Art of Salesmanship.....	Henri H. Jennings 85
Better Enameling.....	E. A. Jamison 89
Calendar .....	93
Don't Worry Over Competition.....	John W. Kelly 94
Power: First Overhaul at 250,000 Miles.....	Carl Abell 102
Display Appliances to Make Sales.....	Joe Baer 110
Products .....	122
Will Use Propane as Solvent.....	H. H. Slawson 128
Trade .....	134
Classified .....	158
Advertisers .....	160

### Publication Office

Los Angeles (4)—198 So. Alvarado St. Phone: DUnkirk 7-4337

### Branch Offices

New York (18)—11 W. 42nd St. Joseph M. Dematthew, Manager. Phone: CHICKering 4-1969.  
 Chicago (3)—1064 Peoples Gas Bldg. David Carmen, Manager. Phone WAbash 2-2589.  
 Tulsa (5)—1341 South Boston. Craig Espy, Manager. Phone: 2-5726.

Lynn C. Denny, *Editor*; Edward K. Titus, *Eastern Editor*; Paul Lady, *West Coast Editor*; Lester L. Luxon, *Technical Editor*; Ted Shields, *News Editor*; Barbara Hall, *Editorial Assistant*; O. D. Hall, *Mid-Continent Editor*; Fred L. Dalton, *Art Editor*.  
 Jay Jenkins, *President and Publisher*; James E. Jenkins, *Secretary-Treasurer*; Robert C. Horton, *Circulation Manager*; Gene Masters, *Research*.

February, 1950

Volume 12

Number 2

BUTANE-PROPANE News is published monthly. Copyright 1950 by Jenkins Publications, Inc., at 198 So. Alvarado St., Los Angeles 4, California. Subscription price: United States and U. S. Possessions, Canada, Mexico, Cuba, South and Central American Countries (in advance), 50c per copy, one year \$2.00; two years, \$3.50; three years, \$5.00. All other countries \$3.00 per year. By air mail \$8 per year, in U. S. only. Entered as second-class matter May 29, 1939, at the post office at Los Angeles, California, under the Act of March 8, 1879. Member of Audit Bureau of Circulation, Liquefied Petroleum Gas Assn., National Butane-Propane Assn., Society of Business Magazine Editors.

Publishers: G A S, The Magazine of the Gas Utility Industry; HANDBOOK BUTANE-PROPANE GASES; THE BOTTLED GAS MANUAL; Annual BUTANE-PROPANE News CATALOG; B-P News BULK PLANT DIRECTORY; WESTERN METALS.

# LETTERS

• **BUTANE-PROPANE News** welcomes letters from our readers, but it must be understood that this magazine does not necessarily concur in opinions expressed by them.—Editor.

Gentlemen:

We are anticipating the installation of vented, forced air, unit heaters in a clothing store, but the owner has had information to the effect that there is a chemical reaction from LP-Gas that is injurious to wool clothing.

We have tried to convince him that this is not the case with this type of equipment and believe that if you will write us a letter verifying our assurance, we will be able to make the sale.

R.F.S.

Georgia

Liquefied petroleum gas heaters which are properly vented give off no products of combustion in the room in which they are installed. They only release heat and this heat would be no different than that generated by electricity, coal or other product, and this would in no way affect wool clothing, in our estimation.—Ed.

Gentlemen:

We have had the experience with several makes of space heaters of having the burner making a loud report when the burner shuts off. No amount of adjustment of air or pressure within reasonable limits seems to stop this particular annoying habit.

This seems to have been with drill port burners. Slot type burners have

caused very little trouble. We have checked these burners for correct drill in relation to the orifice; found them to be correct according to information we have at hand.

Would you please suggest some way we might silence these burners?

E.B.

Iowa

The trouble you are having with drilled port burners "popping back" when they are shut off, indicates that the ports are too large in diameter, thus allowing the flame to flash back through them when it reaches a minimum velocity.

The best way to correct this condition is to replace them with burner heads which have been designed for liquefied petroleum gas.

We would suggest that you check the burner heads to see if they are AGA-approved.—Ed.

•

Gentlemen:

In the next few weeks we will install a brooder system consisting of eight 1000 chick-size brooders using AR Wood units, serviced by a 500-gallon propane tank. Even though we use alcohol in our tanks we still have some regulator icing difficulties.

Since these brooders are not equipped with automatic shutoff controls, would it be possible to insert a Minneapolis-Honeywell or a General Control in the main  $\frac{3}{4}$ " line to turn off the gas in the event that the regulator should restrict the flow of gas to the units?

Would it also be possible to connect this control with a remote indicator in the house about 50 feet distant so that it would warn the owner if the

gas supply to the brooders was interrupted, by means of an electric light or buzzer?

D.W.

Iowa

We do not understand just what you mean by a Minneapolis-Honeywell or a General Control in the main  $\frac{3}{4}$ -inch line. Do you refer to one of their pilot-operated automatic safety shutoff valves or to an electric operated solenoid valve?

We are suggesting two or three ways in which you may solve your problem and protect your customer.

First, you can provide two-stage regulation, by placing a five-pound regulator at the storage tank, and a low pressure regulator in the line at the entrance to the brooder house. The second stage regulator could be either a Fisher No. 738, or a Reliance Type H as they have overload and low pressure shutoff valves built into them.

When either of these regulators close, due to low pressure or overload, they will not open until they are manually re-set. A type 509L Vaporstat, manufactured by Minneapolis-Honeywell, should be installed in the low pressure section of the  $\frac{3}{4}$ -inch gas line. This vaporstat will close an electric contact, with falling pressure, and it can be wired to ring an electric bell, or turn on a light, at any remote spot you choose. It can also be adjusted to close at any desired pressure between one and 15 inches water column.

A second method would be to protect each brooder with 100% safety shutoff and pilot light. A Minneapolis-Honeywell vaporstat should than be placed between the 100% shutoff and the burner control valve serving each brooder. All eight of these vaporstats should be wired in parallel to the bell or light. This system has the advantage of giving warning if any of the separate brooders should fail, and also if the gas supply to the whole group of brooders should fail.

A third method would be to install the single stage regulator at the propane tank and place the Minneapolis-Honeywell vaporstat in the main  $\frac{3}{4}$ -inch service line at a convenient location. Connect the vaporstat to a bell, or light, as described above.—Ed.

Gentlemen:

Should the high-pressure side of a two-stage system have pressure relief?

We use this setup on some yard lines. First stage, 10 lbs. on tank and second stage, 11-in. water column at building. What setting relief?

J.W.T.

North Dakota

It is unnecessary to have pressure relief on the high pressure stage of your two pressure system, providing that the valves, pipe fittings, pipe, and low pressure regulator are correct to withstand tank pressure, in case the first stage regulator should fail.

The low pressure regulator should be protected, on the discharge side, with pressure relief as required by the NBFU Codes.—Ed.

•

Gentlemen:

Can you give me the number of cubic feet in 1 gallon of butane and propane, and also in 1 therm of each of these gases?

O.C.H.

Kansas

We have compiled the following table showing the number of cubic feet in one gal. of propane and butane and in one therm of these fuels.

	Normal Butane	Iso- Butane	Propane
Cu. ft. per gal. @ 60°			
F. and 1 atmospheric pressure (14.7 psi abs)	31.79	30.65	36.45
Cu. ft. of gas @ 60°			
F. containing 1 therm of heat units .....	30.61	30.68	39.66
			—Ed.

•

Gentlemen:

I am having some peculiar trouble with a bottled gas range. I can set the top burners to work OK when the oven is off, but when I light the oven, the burners act as if they are getting too much air. But, no matter how much air I shut off, it doesn't do any good.

The flame just works out away

from the burner. Then when I turn the oven off, the top burners settle down again.

Any information on this will be greatly appreciated.

J.W.L.

Illinois

It would seem that your trouble probably lies in too high a regulator setting. We suggest that you check your line pressure, which should show 11 inches water column or 6 ounces.

If the pressure is too high, the flame would be inclined to lift when all the burners were on and they were getting the full impact of the high line pressure.

If this does not solve your problem, let us know and tell us what pressure your regulator shows and any other conditions.—Ed.

Second letter:

I have checked the regulator pressure and it checks OK—6 ounces.

But I still can't find the trouble. The top burners work OK until the oven is lit, then the flame starts lifting away from the burners. And, when the oven and top burners are on, the meat oven won't light at all.

Could it be that I have too small a pipe on it? I have a  $\frac{3}{8}$  O.D. copper tube on it.

J.W.L.

Since the regulator is functioning properly we believe your trouble with the top burners may be caused by the burnt gasses from the oven not following their proper course when venting. The fumes from the oven are coming up around the top burners, or around the air shutters of the burners.

This may be caused by a deflector plate being out of place, a shield or other part missing which allows the oven fumes to reach the burners. An improper orifice in the

oven burner, permitting too much fuel to enter, may be accentuating this trouble.

The same items as mentioned above may be causing the trouble in the meat oven also.

Although the  $\frac{3}{8}$ -inch O.D. tubing seems a little small, it should not cause the trouble you are having. If the top burners cut down when the oven is lit, or the burners fluctuate when neighboring ones are turned on or off, then the  $\frac{3}{8}$ -inch tube is too small.—Ed.

Gentlemen:

What, in your opinion, would be the minimum amount of propane required in a mixture of butane-propane in order that the resultant fuel mixture performs satisfactorily at zero temperatures?

Would the size of the storage enter into the calculation?

J.W.W.

California

The minimum amount of propane in a mixture of butane-propane which can be subjected to zero temperatures without condensation taking place is 62.5%.

The above percentage is for atmospheric pressure, and since the mixture in the distribution lines is subjected to higher pressure, the percentage of propane in the mixture should be increased beyond the minimum to avoid condensation. (See Fig. 9, Page 49, Third Edition, Handbook Butane-Propane Gases.)

We recommend that the percentage of propane in the mixture be kept above 70%, and would suggest that straight commercial propane be used, if possible.

Larger storage capacity would have a favorable effect toward preventing condensation because the liquid would cool more slowly. We are speaking of propane and normal butane in the above paragraphs. Any iso-butane in the mixture would lower the dew point, thus permitting the use of slightly less propane in the mixture.—Ed.





*New*  
No. 320  
**Vented  
Heater**

...heads the line of  
**thrifty Comforteers for 1950**

Be sure to get details on the new 1950 line of Comforteers! Many different models, each one an outstanding value at an amazingly small cost. You can meet the exact needs of every customer (in radiant and circulating types from 8,000 to 35,000 Btu) — at a price that gets you the business.

The 1950 line includes two brand new models: the vented No. 320 (20,000 Btu) and the new No. 135 (35,000 Btu); plus completely redesigned radiant-circulator and circulating heaters in 25,000 Btu capacities. All larger capacity heaters are equipped for use with safety pilots and other safety devices.

New literature available soon. Write now for full details.

**INLAND STEEL CONTAINER COMPANY**

325 N. Cortex Street • New Orleans 19, Louisiana

## COMMENT

THAT LP-Gas distribution increased in volume by only 8.5% over 1948 was a real surprise to the industry when the Phillips Petroleum Co. estimate was released last month.

Annual increases of from 15 to 40% have been so prevailing during the last dozen years that no one was prepared for this let-down.

Less fuel for heating last winter, due to warmer weather, was given as the principal cause.

Actually a more than 1/12th gain is not bad business. It's only bad by comparison. Every division of utilization showed an increase.

We prophecy at least twice the gain in '50 as the estimate for '49.

According to a recent LPGA bulletin, the following state legislatures will meet in 1950:

California, March; Kentucky, January; Louisiana, May; Maryland, February; Massachusetts, January; Mississippi, January; New Jersey, January; New York, January; Rhode Island, January; South Carolina, January; Virginia, January.

In addition to the above regular sessions, special sessions will be held in Georgia, Idaho, and Texas.

Watch for the introduction of new bills unfavorable to LP-Gas.

Georgia is expected to adopt NBFU Pamphlet No. 58 as its code.

Michigan and Rhode Island will probably do the same.

The Bureau of the Census has just released its form for compiling the data which will be collected in the most elaborate census of population

and housing which has ever been undertaken in this country.

With the aid of trade associations and manufacturers in the cooking and heating appliance industry, the Census Bureau has developed what is considered an adequate survey of the types of cooking and heating equipment in use, sub-divided by fuels.

Data on heating equipment will be collected under the following headings:

Steam and hot water

Warm air

Other means vented

Other means unvented

Not heated

Vacant

Fuels for both cooking and heating will be broken down as follows:

Coal and wood

Utility gas

Bottled gas

Other liquid fuel

Electricity

Not reported

Vacant

Philip J. Hauser, the acting director of the Census, has stated that he believes the 1950 census will develop more valuable statistical material than any similar study in the history of the country.

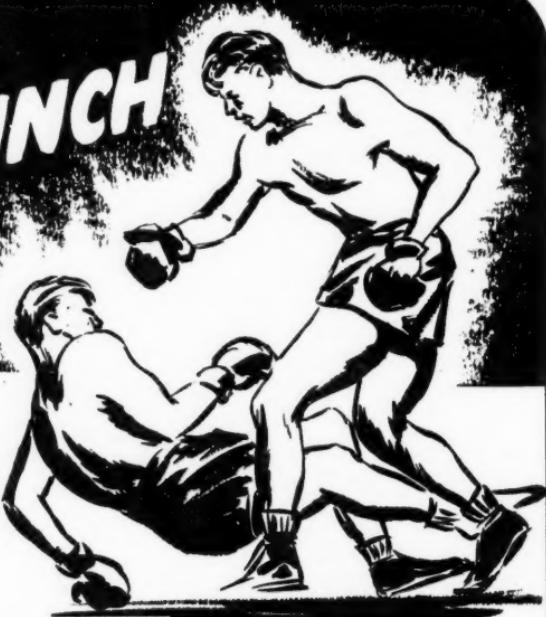
Ultimately all the states may be expected to enact fair legislation. However, it will take industry cooperation and watchfulness to accomplish this.

Don't forget—Safety is still the Number 1 problem.

By Ed.

# THE BIG PUNCH

... that's  
Beacon's  
Better



## BUTANE-PROPANE SERVICE

Yes, you can knock out delivery problems when you depend on Beacon, because of the teamwork and efficiency of our organization. Let us introduce you to this better butane-propane service.

• PHONE 5-5553 TULSA  
•  
•  
•  
•  
or  
WEBster 95886 Chicago

# BEACON

## PETROLEUM COMPANY

P. O. BOX 2618 ••  
TULSA, OKLAHOMA

53 West Jackson Blvd.  
CHICAGO 4, ILLINOIS

## BEYOND THE MAINS



NATIONAL income is at an all-time high, and likely to go higher this year.

The opportunity this presents to the butane-propane industry is obvious. The year 1949 showed an increase in volume of gas sold, and K. W. Rugh and E. O. Mattocks point out this month that this was despite a mild winter a year ago. More normal winter temperatures are a stimulus to the industry. Already six and a half million farm and suburban homes beyond the mains are enjoying LP-Gas service.

And with increased national income likely this year, there's a real opportunity.

But —

The "but" is pointed out by Arno H. Johnson, prominent New York media and research authority, when he says:

"Changes in habits of standards of living do not take place automatically with changes of income, since it takes time to educate people to an acceptance of the next higher standard of living. But the increased market potentials do exist, and can be developed by aggressive marketing."

In other words, in the LP-Gas or any other business, it isn't enough that consumers have the income to spend on your product. You must educate them to the idea of using that income to raise their living standard by buying your product.

It looks good for the new organization of the LP-Gas industry in New England. Its formation reduces the amount of territory in the Northeast in which distributors, dealers and manufacturers have not yet banded together. Pennsylvania and New Jersey have strong, going associations. In New York State some local groups have met.

Plumer E. Pope, of East Weymouth, Mass., tells us as this is written that more than 130 acceptances came in, with more expected, for the opening dinner at the University Club, Boston.

Legislation coming up all the time is one motive for getting together in New England. The organizers feel that the national LP-Gas associations have proved that when members of the industry get together, relations are better and mutual problems easier to straighten out.

An example of the kind of civic movement in which members of the butane-propane industry could advance themselves and their industry public-relations wise, is the Greater Philadelphia-South Jersey Council.

This Council will attack economic and industrial problems of a 9-county region.

But where is the LP-Gas man on the Council?

The 9-man (and one woman) Council includes a steel man, two other manufacturers, a newspaper publisher, representatives of a company distributing piped gas and of a combination electric and gas utility, a radio manufacturer, a prominent woman banker and an oil distributor.

Our guess is there's more square mileage beyond the mains than within the mains in this territory.

Membership of LP-Gas men on such bodies should dramatize the importance and position of the industry. It should help sales to have a representative of the industry on such groups, thus calling attention to the importance of our fuel as an ally of industrial, commercial, and residential development beyond the mains.

*Butane-propane is now a ten billion dollar industry (\$10,000,000,000 whew!). That means there's that much invested in it. It's time this industry began thinking of itself in a big way, promotion-wise and every way.*

As Burt Prettyman, of Libertyville, N. Y., sales manager of Fuelane Corp., put it at the North East meeting:

"We've got the snowballs—let's throw 'em."

It's gratifying to hear that the bottled gas men on Long Island are working on some local cooperative publicity promotion, to throw snowballs telling the honest truth about fuel values back at the two city-owned utilities.

*Ed Titus*

# WHAT HAPPENED IN 1949

BY K. W. RUGH\* AND E. O. MATTOCKS\*\*



K. W. RUGH



E. O. MATTOCKS

(Digested and illustrated by special graphs and tables prepared by BUTANE PROPANE News.)

THE liquefied petroleum gas industry continued its steady growth of increased sales during the year 1949. It is estimated that last year the total volume of LP-Gas marketed in the United States was 2,725,000,000 gallons. This represents an 8.5% increase over the volume sold in 1948.

The quantity of liquefied petroleum gas now being marketed classifies this industry as one of the major fuel suppliers in this country. Known reserves and presently available but unrecovered volumes of LP-Gas indicate adequate quantities for the increasing future demands.

Graphs and tables on succeeding

pages show the various amounts of fuel consumed by the several subdivisions of the industry.

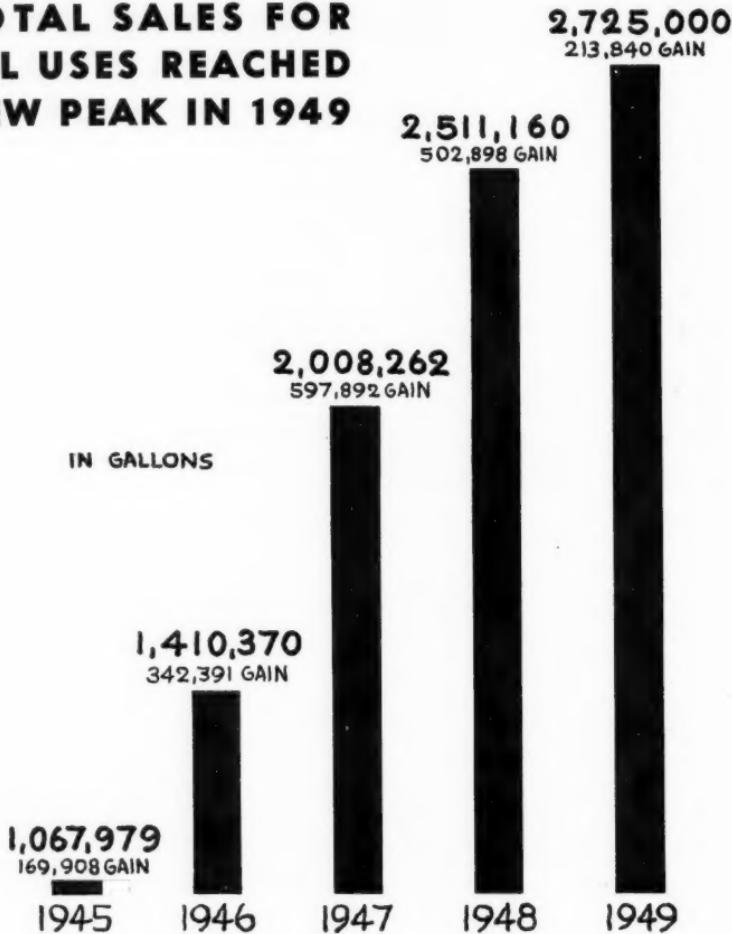
Figures for all years except 1949 were obtained from the U. S. Bureau of Mines reports. All other volumes were estimated by the writers. Figures do not include butane blended with heavier petroleum fractions for motor fuel purposes. Neither are intercompany sales of LP-Gases included, nor fuel used by producers at their plants. Sales of hydrocarbons to plants manufacturing synthetic rubber and aviation gasoline are excluded.

For gas manufacturing purposes, approximately 240,000,000 gals. were used in 1949, an increase of 1%. There are some 400 central plants using LP-Gas exclusively for distribution through underground mains.

Interest in safety has continued at a high level during the year. The Interstate Commerce Commission has issued new specifications governing the transportation of liquefied petroleum gas in cargo tanks (truck tanks), and portable tank containers (skid tanks).

\*Manager, Philgas Division—Sales Department, and \*\*Technical Representative, Chemical Engineering Department, Phillips Petroleum Co.

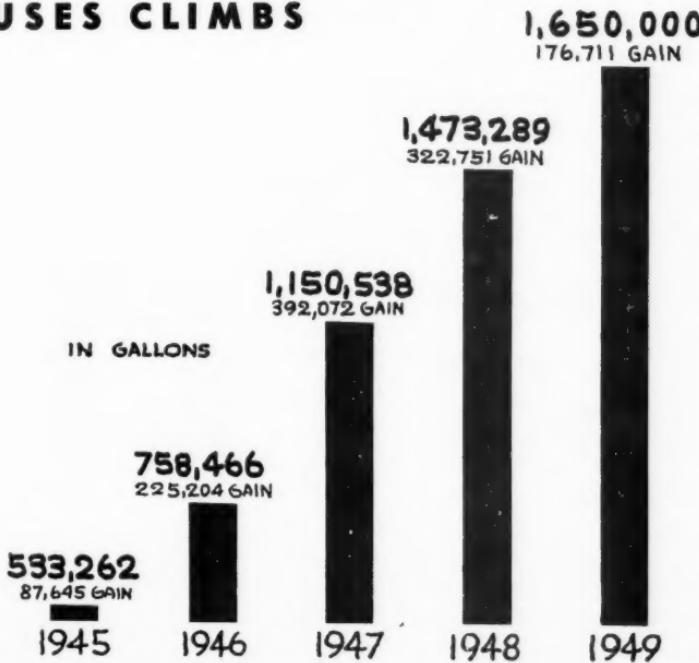
## TOTAL SALES FOR ALL USES REACHED NEW PEAK IN 1949



The fact that the increase in sales volume during the year 1949 was 8.5% when increases during the past few years have ranged from 25% to 30% does not in itself indicate that continuing lesser percentage increases in marketed volume can be expected during the next few years. The percent increase in 1949 was low because of the mild weather in the winter of 1948-1949 in those areas where liquefied petroleum gas is used extensively for house heating and because many new natural gas transmission lines were placed in operation during the year 1949. Some of the liquefied petroleum gas used by utilities was displaced by this new supply of natural gas. Over a period of years we can assume that normal winter temperatures and demand for liquefied gas to augment natural gas supplies during peak conditions will again create the normal increased demand for liquefied petroleum gas and the industry will again enjoy its traditional large percentage increases.

It is estimated that the volume of LP-Gas sold for domestic purposes in 1949 reached 1,650,000,000 gallons. This represents an increase over 1948 sales of 12%. The demand from present consumers for additional gas appliances and the demand from new consumers for LP-Gas for cooking, water heating, refrigeration and space heating was as much in evidence as during any previous year. It is estimated that there are 6,500,000 homes enjoying the use of LP-Gas service in farm and suburban homes beyond the gas mains. Included in the domestic figures are requirements for irrigation pumping, tractor fuel, flame weeding, chicken brooding and fuel sold by domestic distributors but used for industrial purposes, internal combustion engines, and for gas manufacturing purposes. During 1949 the use of LP-Gas for tractor fuel was greatly accelerated. This increased use was brought about not only by the recognition of the economical and mechanical advantages from its use, but also by the development of a low cost method whereby LP-Gas could be utilized in the conventional carburetion system interchangeable with the liquid fuel for which the engine was originally equipped. Considerable interest is being shown in the use of LP-Gas to fuel trucks and buses on the highway, and a continuing demand exists for LP-Gas to fuel engines in heavy duty construction and mining equipment.

## SALES VOLUME FOR DOMESTIC USES CLIMBS



## INDUSTRIAL VOLUME CONTINUES TO GAIN

IN GALLONS

256,577	253,745	274,125	309,269	310,000
1,987 GAIN	2,832 LOSS	20,380 GAIN	35,144 GAIN	10,731 GAIN



The volume of LP-Gas used in 1949 for industrial purposes, internal combustion engine operation and other miscellaneous industrial uses is estimated at 310,000,000 gallons. This represents an increase over that consumed in 1948 of 0.3%. During 1949 many industrial plants turned to LP-Gas for their major source of fuel. In addition, as natural gas lines were extended, making natural gas available to many industrial plants, some of these plants installed LP-Gas standby installations to serve as the fuel supply during emergencies when the natural gas supply is interrupted, or during winter months when household and industrial plant space heating requirements cause curtailment of natural gas supplies normally available for manufacturing purposes. The continued demand for LP-Gas for either constant use or standby use indicates a continuing expanded market for LP-Gas to industrial plants.

## CHEMICAL INDUSTRY ACCEPTANCE GROWS

IN GALLONS

224,291	311,499	414,267	490,964	525,000
72,306 GAIN	87,208 GAIN	102,768 GAIN	76,697 GAIN	34,136 GAIN



LP-Gas is continuing to be accepted as an ideal raw material by the chemical industry for the production of chemical intermediates. A number of plants under construction or just completed in 1948 have been on stream during most of 1949. It is estimated that the LP-Gas used by chemical manufacturers during 1949 was 525,000,000 gallons which is an increase of 6.9% over that consumed in 1948.

# How to Save Money on Your Tax Returns

By HAROLD J. ASHE

**B**ECAUSE of the nature of the business, one of the most serious problems confronting the LP-Gas dealer is that of casualty losses. Because of high insurance rates, the dealer may fail to carry full coverage on certain risks, and on others he may share the risks to hold down premiums.

If he sustains a loss, he is confronted with the problem of how to reflect this in his income tax return. Failure to take loss deductions when a loss is sustained is one of the commonest oversights in the making of tax returns for small businessmen. Particularly if the loss is a partial one, and the damage is repaired and forgotten by the time the tax return is made, it is apt to be excluded.

It is unwise for the taxpayer who has suffered a casualty loss to trust to memory in getting such a loss into his return, or in accu-

rately reporting the loss. Such a slipshod approach may result in the deduction being questioned or disallowed by the Bureau of Internal Revenue.

When a loss is sustained, the dealer should immediately start building a record to substantiate the amount of the loss. Or, if not done at the time in the case of 1949 losses, he should still try to assemble such a record prior to taking the deduction in his return. Partial losses are especially subject to dispute. It is wise to have an

appraisal of the loss made before the damage is repaired. Repair bills should be kept against future need.

The general rule applying to deduction where destruction is complete is that the amount of the deduction shall equal the adjusted basis of the value of the property. That is, the original cost less de-



Even though a husband and wife use different accounting methods, they may file joint income tax returns.

preciation since acquisition and to date of the loss.

However, where the loss is partial, the deduction shall be the VALUE of the property immediately prior to the loss, less the VALUE of the property immediately after the loss. This loss must not exceed the adjusted basis.

In both partial and total loss, any compensation from insurance must be deducted from the loss to arrive at the unrecovered loss. The unrecovered loss is the amount deductible in the tax return.

As an example, take the case of a dealer's building partially destroyed by flood. Here is how the loss is reckoned for tax purposes:

1. Cost of building in 1936 .....	\$25,000
2. Depreciation to date of loss .....	9,000
3. Maximum deduction .....	16,000
4. Value before flood .....	15,000
5. Value after flood .....	11,000
6. Flood loss .....	4,000
7. Insurance received .....	1,500
8. Unrecovered loss .....	2,500

As the unrecovered loss is less than the basis (Item 3), the dealer's deduction is \$2500, the unrecovered loss.

Dealers should be particularly alert to the tax-saving implications of depreciation schedules. Generally, depreciable assets should be depreciated over the shortest period of time permissible, and not ignoring the fact that the average life of an asset may not be its life under conditions prevailing with a particular dealer. The Internal Revenue Bureau recognizes that a particular asset under actual usage may have either a shorter or longer life than average. LP-Gas dealers have found that generally a 10-year

depreciation period for tanks and cylinders is acceptable to the Bureau.

For a further discussion on depreciation, the reader is referred to page 106, December issue of BUTANE-PROPANE News.

While most dealers entrust the problem of making the tax return to accountants or tax attorneys, it should not be assumed that the turning over of books to the latter will automatically result in the filing of a tax return which will reflect all business expenses, or that will result in the lowest possible legitimate tax.

#### Don't Forget Auto Expense

For example, many LP-Gas dealers, operating as sole proprietors or partnerships, use their own automobiles for business purposes without charging business use of such cars to the business. Under such conditions, the accountant will have no knowledge of the fact unless the dealer so informs him.

To the extent that a dealer uses his private automobile for business purposes, to that extent car costs are a deductible business expense. Prior to paying income taxes, dealers reasoned with some logic that, whether the car was charged to business or not, it was immaterial whether paid out of business or out of pocket.

Maintenance of a private car may easily run into \$1000 or \$1200 a year. If the car is used 75% for business, 25% for personal use, 75% may be entered as a business expense, or \$750 to \$900. This overlooked item, alone, may reduce the

tax bill by \$200 or \$300! In this connection, dealers should not overlook the tax-saving implications of car depreciation.

While tax counselors will determine whether married couples should file joint returns or separate returns as tax-savers, and whether clients should use the short-form or take the standard deduction on the one hand, or use the long-form and itemize non-business deductions on the other hand, dealers must be prepared to furnish ALL non-business data necessary to the making of an intelligent choice.

Joint returns for married couples usually, but do not always, effect tax savings. For example, if both spouses have separate incomes, and both have large non-business deductions, separate returns may result in substantial tax savings if one spouse has large medical deductions and the other spouse has little or none. Separate returns may be advisable where both spouses have sustained capital net losses, if both have substantially the same income.

Whether the tax counselor will itemize non-business deductions or take the standard deduction or use the short form hinges upon whether itemizing will result in a tax saving. The LP-Gas dealer must supply his counsel with these facts. If the dealer has sustained heavy medical expenses, owns his home, has contributed substantially to charities, has sustained personal losses, and has paid considerable interest on non-business loans, or part of these, he should assemble all such data from his personal records and supply counsel with it.

## Bottled Gas To Be Sold By Florida Power Co.

Bottled gas was made available by Florida Power and Light Co. in Lakeland, Fla., in early December, according to Milton Edwards, manager of the Lakeland office.

The company, supplier of manufactured gas from mains for many years, is entering the bottled gas business in order to supply customers who cannot be reached at present with underground gas mains.

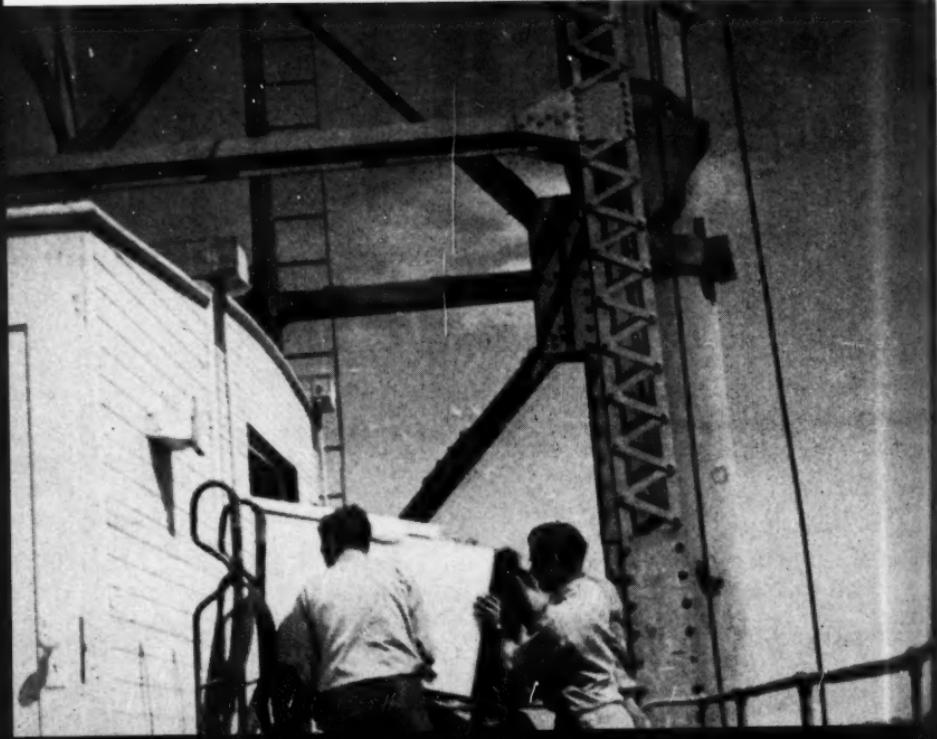
Florida Power will make bottled gas available in 100-pound containers, and will use the meter system, with customers being billed only for the gas used during the month.

### Will Serve Beyond Mains

"We recently made improvements and extensions in our manufactured gas system and expect to extend our lines further as fast as growth of customers and economic conditions justify," Mr. Edwards stated. "However, at present there are many residences located in areas not supplied by our mains which we will now be able to serve with bottled gas.

"Later, when we lay gas mains in these localities, we will convert customers' gas appliances at no cost to them so they may use gas from our mains instead of the bottled gas containers."

To supply bottled gas customers, Florida Power has completed installation of equipment for bottling the gas. A long concrete loading platform, a brick building, pumps, scales and the other necessary machinery are now ready. Two large tanks of 30,000 and 18,000 gallon capacity, recently erected at the plant, will be utilized for storage of the liquid petroleum gas.





## "VETERAN" DREDGE GOES LP-GAS

THE "Point Loma" (under the command of W. R. Osgood, general superintendent of the Standard Dredging Corp.) was a very tired dredge when she returned from World War II.

She had been leased by the government in 1943 and was put to work in the harbor at Guam. There she was photographed in action by "Life" magazine and, also, was somewhat damaged when an adjacent barge, loaded with dynamite, blew up.

Later, she survived a severe typhoon en route to Tokyo Bay where she was repaired and worked until her return in late 1946. She is now

The Lewis brothers sweat and strain and a Wedgewood range ascends to the upper deck of the "Point Loma."

Through the galley window goes the Servel refrigerator (the door was too narrow).

rested, overhauled and awaiting further action.

Among other things which were renewed was the galley. Its electric range and refrigerator were retired.

The Point Loma switched to LP-Gas. J. E. McPherson, of San Mateo, Calif., where the dredge is stationed, made the sale—a "Wedgewood" kitchen-heater range and a Servel refrigerator using "Flamo" liquefied petroleum gas—notwithstanding the fact that 110 AC current was available for lighting and that the dredge is operated by electricity.

Mr. McPherson and the Lewis Bros., who made the installation, thoroughly enjoyed their part in contributing to the happiness of Mr. and Mrs. A. R. Ebermayer and the crew, who operate the Point Loma.

---

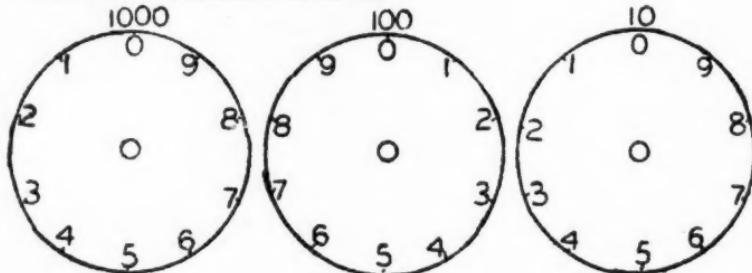
By SID PEXTON



### DUALANE METERED GAS SERVICE

Date 194

PLEASE MARK POSITION OF HANDS



Signed \_\_\_\_\_ Customer \_\_\_\_\_

Fig. 1.

## **The Customer** *Reads the Meter*

**D**UALENE Gas Company, of Columbia, S. C., has a postcard system for keeping track of the amount of gas used by customers.

The meters are read once a month by the customers, themselves. Each month the company sends the customer a return postcard (Fig. 1).

The message reads as follows:

"Dear Customer:

"Please read the meter on your gas system, marking the position of the hands as of that date, on the at-

tached postcard and returning same to us. Thanking you in advance,  
**"DUALENE GAS COMPANY, INC."**

The return part of the postcard is addressed to the Dualene Gas Co., and there are three clock-like diagrams representing the meter.

The customer is asked to "Please mark position of the hands," put the date on the card and then sign name.

The cards are numbered as an identification in case the customer neglects to sign. The cards go out

on the 27th of each month. On receipt of the returned cards, the invoice goes out, after the manner of a utility, for the amount of gas consumed that month.

Each installation has a Rockwell-Emco "00" meter. Dualene uses 200-pound to 420-pound cylinders. They are filled by tank trucks on regular routes. The company has an 18,000 gallon bulk plant, two trucks of 765 gallon and 1160 gallon capacity, and one service truck.

The district around Columbia is the territory covered, and it is divided into twelve different routes.

Officers of Dualene are E. K. Butler, Jr., president and treasurer, and E. K. Butler, Sr., vice president and

secretary. Mr. Butler, Jr., also is secretary of the South Carolina Liquidified Petroleum Gas Assn.

Appliance installation and consumption records used by Dualene (Fig. 2) are simple and complete.

Fig. 2.

Customer _____	Route _____			
Address _____				
Tank ( ) Cylinder ( ) Capacity _____	Gallons _____			
<b>APPLIANCES</b>				
No. _____	Floor Furn. Make _____	Model _____		
Number _____	Space Heaters.			
Range ( )	Hot Water Heater ( )	Refrigerator ( )		
DATE	% BEFORE	% AFTER	NO. GALS. DELIVERED	REMARKS

## Dairy Sterilizer Builds Good Will

**D**EALERS who shun small-quantity LP-Gas customers—in fact, discourage such sales—might reconsider on a purely “paid in satisfaction basis” the case of Hoke Evetts who, though a small user, is a steady LP-Gas booster.

Mr. Evetts’ modern, but modest Hoke Dairy, near Bakersfield, Calif., installed a McHale Kleen milk sterilizer several years ago. Since then it has used a steady, but scant 50-60 gallons of LP-Gas fuel a month—but enough to keep all its dairy equipment sterilized.

Three times a day Hoke Dairy’s chief milker, Henry O’Neal, literally

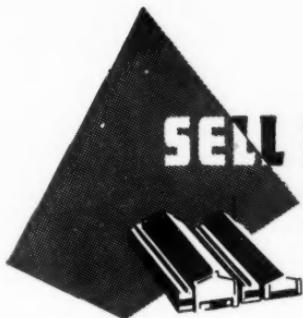
stuffs the company’s one sterilizer to the bursting point, and in from three to five minutes of operations, thoroughly cleans a potpourri of dairy equipment—including milk pails, pipes, five Surge milkers and a conglomeration of other dairy essentials.

The dairy finds its one 150-gal. LP-Gas tank more than enough to satisfy its short-duration daily needs for a quick steam cabinet temperature of 200° F.

Evetts’ dairy may not be the biggest user—but it’s a steady and satisfied one. Which is dollar and cents and community salesmanship rolled into one.

Henry O’Neal, chief milker, and the butane fueled milk sterilizer.





# SELL SAFE PRACTICES TO SMALL INDUSTRY

By LESTER L. LUXON

Technical Editor, BUTANE-PROPANE News

## In Two Parts Part 2

Although the designs and applications of these three classes of burners are different, and there are numerous designs and styles in each class, the application of safe operating practices to all of them is similar.

The basic principle of protecting the combustion system against the dangers of flame failure, consists of shutting off the gas supply in such a manner that it cannot come on again until a certain sequence of operations is carried out. This sequence must follow a pattern which necessitates the correction of the cause of flame failure, the purging of unburned gas from the furnace or oven, and the relighting of the burners in an approved manner.

The simplest flame failure pro-

tecting device employs a safety pilot which, by means of an electrical impulse generated by a small flame which heats a thermocouple, holds a valve open in the gas line which feeds the main burner. If the pilot light fails, the valve to the burner closes. It cannot be opened again until the pilot is lighted and the valve is opened manually.

The application of this type of pilot is limited to locations which are not subjected to strong drafts. It can be applied to water heaters, small boilers, air heaters, driers, evaporators, tar kettles, and other types of equipment which use multiple port burner heads and where the pilot flame can be protected from drafts which might cause it to fail (Fig. 6).

A similar type which uses a pilot designed to withstand drafts, and which can be used with atmospheric burners like the one illustrated in Fig. 3, is shown in Fig. 7 pro-

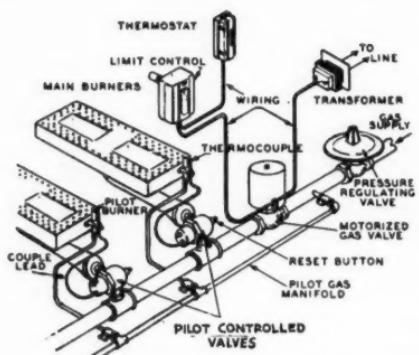


Fig. 6. A simple form of flame failure protective device applicable to locations not subject to strong drafts.

tecting burners which fire into immersed tubes. This same type of safety pilot can be used on burners for air heaters, foundry furnaces, drying ovens, baking ovens, etc. The manufacturer's specifications for gas pressure and flow capacity should be checked to see that they will operate satisfactorily under the conditions to which they will be subjected.

Many of these valves cannot operate safely under gas pressure in excess of one pound. It is necessary to resort to other types of shutoff valves and protective devices for the higher operating pressures.

Air heaters and ovens employing exhaust fans, forced air blowers, or circulating air fans, should be protected with devices which will insure the proper functioning of the fans before it is possible to light the burners.

Air flow switches, electric relays,

or pressure switches, can be used in series with time delay relays to insure that the fans are running and have time to purge the oven of any gas that may have accumulated due to leakage. A temperature limit control switch may be placed in the system at a strategic point to protect the most vulnerable part of the system against overheat. Air flow switches or pressure switches are preferable to electric relays when the fan is driven by electric motor through a belt or coupling (Fig. 8).

Boilers should be equipped with high pressure and low water level cut-offs in addition to safety pilots and steam pressure controls.

Another type of flame failure safeguard which has a widespread usage for industrial applications is illustrated in the diagram (Fig. 9). This device is based on the fact that flame is a better conductor of an electric current than air or gas. Therefore, a special rod is placed in such a position that an electric circuit is completed when the fire is lit and the flame contacts the flame rod. These instruments can be wired in series with time delays, pressure switches and other safety devices as outlined above.

Furnaces or kilns equipped with 100% pre-mixed combustion systems usually operate at high temperatures. The burners are sealed into refractory tunnels which aid in igniting the gas-air mixture as it enters the combustion space and help to maintain combustion of the mixture. Pilot lights with flame failure safeguards are not generally applied to these

burner systems. Instead, continuous pilots supplied with the gas-air mixture through a separate line are often used. These pilots are lit outside the furnace and then inserted in a receptacle provided for them. A sight glass is provided so that the pilot and burner can be seen in operation.

Since a flash back through a burner port would ignite the pre-mixed gas and air in the manifold and damage the manifold piping and the compressor, these systems should be equipped with special explosion heads which would burst, and cause a valve in the discharge line from the gas mixer to close. In so doing, it would release the

high pressure which had been produced. The explosion head should be placed outside the building and located so that it will not injure personnel or property when it ruptures.

Flame arrestors should be installed in the pre-mixed gas line to each burner to provide additional protection for the burner manifolding and for the compressors. These flame arrestors should be placed as close to the burners as possible. If a flash back at a burner should occur, a roll of copper gauze within the flame arrestor prevents the passage of flame into the main gas pipe. A valve, held open by a fusible link, is built into the flame arrestor and closes when the fusible link melts, due to the heat from the burning gas. This valve prevents any more fuel from entering the arrestor.

The compressor and mixing equipment should be protected with pressure switches and with shutoff valves which would stop the compressor if the gas supply failed and would instantly close a valve in the gas supply if the compressor stopped. This precaution will prevent the gas from entering the system again after a failure in the gas supply has extinguished the flames. If the compressor stopped and the gas continued flowing, it might leak through the mixer into the room through the air inlet.

There is a type of pre-mix burner system which might be confused with the nozzle mixing burners. Separate air and gas supply lines serve individual pro-



Fig. 7. Application of three Bryant Mixjector torches which fire into immersion tubes on an industrial washer. Each burner is equipped with a blast type pilot and individual automatic shutoff valve in the gas supply line.

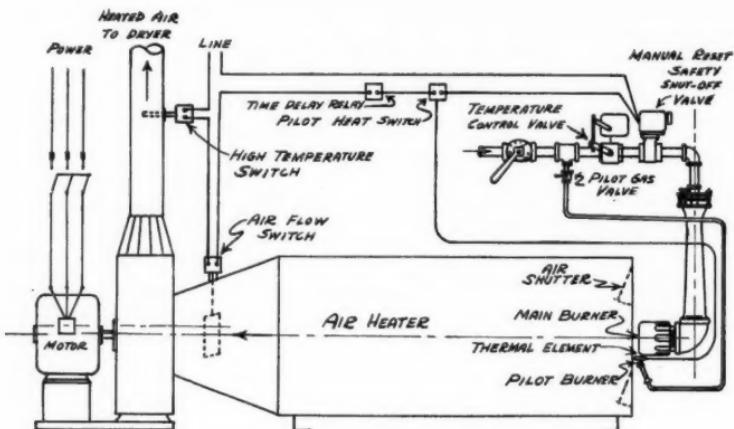


Fig. 8. Illustrates use of other protective devices in series with flame failure safeguard to protect equipment against damage.

portional mixers at each burner. These mixers are close to the burner nozzle, and the back fire hazard that is present in the 100% pre-mix system (where the mixing is done at a central station, compressed and distributed to the burners), is eliminated. These burners may be protected against flame failure with safety pilot controlled valves in the gas lines, or with flame conductivity safety devices such as those used on atmospheric type burners.

Again, the gas line should be protected with a valve which will close if either the gas pressure or the air pressure fails. This valve should be interlocked with air switches, pressure switches, high temperature switches, and time relays, where the safe operation of the burner system requires it.

A popular pre-mix system which is used on small heating jobs not requiring close control of the air to gas ratio is illustrated in Fig. 10. This mixer consists of a small fan which delivers partially pre-mixed air and gas to the flame retention burners which are of the type shown on the atmospheric burner in Fig. 3. Refractory combustion tunnels which aid the ignition of the air-gas mixture are used. They should be protected by continuous pilots which are supplied by a separate unmixed gas manifold as illustrated. A safety shutoff valve should be placed in the line and connected with the following: A pressure switch in the gas line, a pressure switch in the mixed gas line, a time relay, an air flow switch, a temperature limit switch, and any other safety devices which

might be necessary for the safe operation of the equipment.

Nozzle mixing burners of crude design which have separate valves to control the gas and air supplies are often used in small industries. They are very dangerous because the flame is likely to lift from the burner as a result of improper adjustment, or changing pressures, or poor tip design. Gas can escape into the air piping and vice versa, and an explosion of the resulting mixture would damage the gas meters, the air piping, or the blowers.

Nozzle mixing burners may be used with reasonable safety if the gas and air are automatically controlled to give the correct proportion at all times. In one control arrangement the air and gas valves are mechanically connected and are controlled either manually or automatically. This system necessitates an accurate control of both the air and the gas pressure to the valve. Interlocking valves should be installed in the gas line to shut off the gas supply if either the gas or the air pressure fails. These burners should be protected with flame failure safeguards similar to those recommended for inspirator type burners.

When preparing to light a furnace, an oven, or similar piece of equipment which is fully enclosed, open the damper and the doors or other vents wide. Allow sufficient time for any accumulation of gas which might have leaked into the combustion space to escape before starting to light the pilot flames and burners. Do not close the

damper or doors until all the burners are lit and functioning properly.

If desired, switches can be installed on the doors and damper and wired to a pre-ignition circuit. These switches make it necessary for the operator to open the doors and dampers before any gas can reach the pilots or main burners. A time delay can be installed in the circuit if desired.

It is not enough to provide an oven, a furnace, or any other piece of combustion equipment with the best safeguards available. The human element must be considered and correct operating instructions which clearly set forth the proper

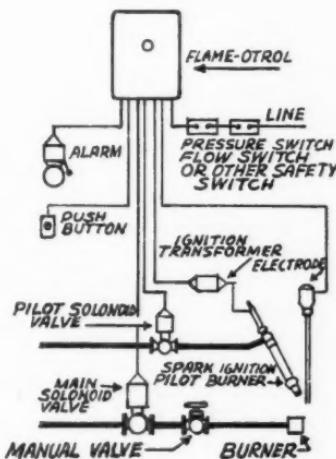


Fig. 9. Illustration of electrode type flame failure safeguard. Numerous arrangements can be made for varied applications from a wide assortment of models.

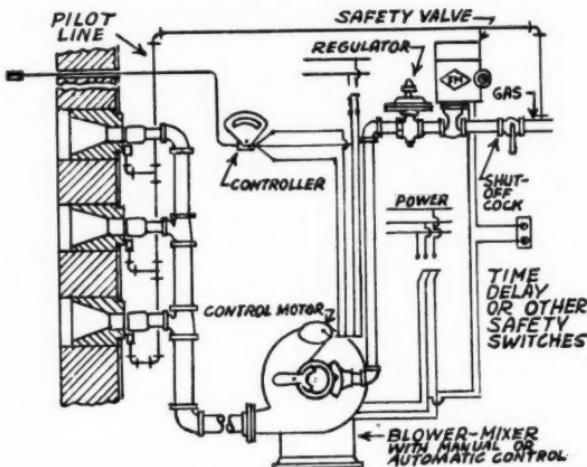


Fig. 10. Sketch illustrating pre-mix system with open type flame nozzles, automatic temperature control and safety shutoff devices.

steps which the operators must take to start each combustion system safely, should be prepared and given to them. These instructions should be posted in a prominent place so the operators can refer to them when necessary. Likewise, complete instructions should be provided for shutting down each piece of equipment.

Use the safety engineers' four steps for properly instructing an operator in the correct manner of doing his job:

1. Explain the system thoroughly, going over each part and each step.
2. Show the operator, by doing each step correctly and in order.
3. Watch the operator do it, and see that he understands what he

is doing and the reason for doing it the way he is told.

4. Check the operator from time to time and be sure he is following the correct procedure.

Let us review the main points for safe LP-Gas-fueled equipment:

1. Install a proper LP-Gas plant to serve the requirements of the business. Make the plant adequate in size to handle the peak demand of the job and install it in accordance with the LP-Gas safety codes.
2. Install piping throughout the plant according to the requirements of local plumbing codes, or as recommended by insurance underwriters.
3. Plan the combustion system to suit the requirements of the ap-

plication, using properly designed burners, flame failure safeguards, and other devices to give the ultimate protection to property and personnel.

4. Study the system and prepare operating procedures for starting, operating and shutting down the combustion system.
5. Be sure the operator understands the system and knows how to start and operate it in a safe manner. Follow up to see that he continues to operate the system safely and that he does not take unsafe "short cuts."

If there is any doubt regarding the best way to set up a combustion system on a drier, oven or other fuel consuming device, don't take a chance. Consult the manufacturer of the combustion equipment or a competent, combustion engineer, or the engineering staff of your industrial insurance company. The cost of such consulting service will be small compared to the cost of damage caused to life and property which may result from the failure to take advantage of such service.

## Two Million Dollars From E.C.A. Will Help Italian Refinery

The present production of an Italian refinery located at Porto Marghera, near Venice, will be more than doubled under an industrial recovery project, the Economic Cooperation Administration has announced in Washington and Rome.

Estimated cost of expanding and modernizing the facilities of IROM (Societe Raffinazione Olli Minerali) is the equivalent of \$6,400,000, including \$2,000,000 in ECA assistance funds. The remainder of the costs will

be provided by the company in Italian currency.

In addition to increasing the plant's production from 520,000 tons per year to 1,100,000 tons annually, the project provides for the installation of facilities for the manufacture of lubricating oil.

ECA's funds will be used for the purchase of special equipment in the United States and for engineering fees. The project calls for the installation of a combined atmospheric and vacuum distillation unit, an acid treating and contact filtration unit for lube oils, an electric generating unit and facilities for truck and tank car loading.

The refinery uses Middle East crude and serves the industrial area in the Po Valley, Venice and other Adriatic ports.

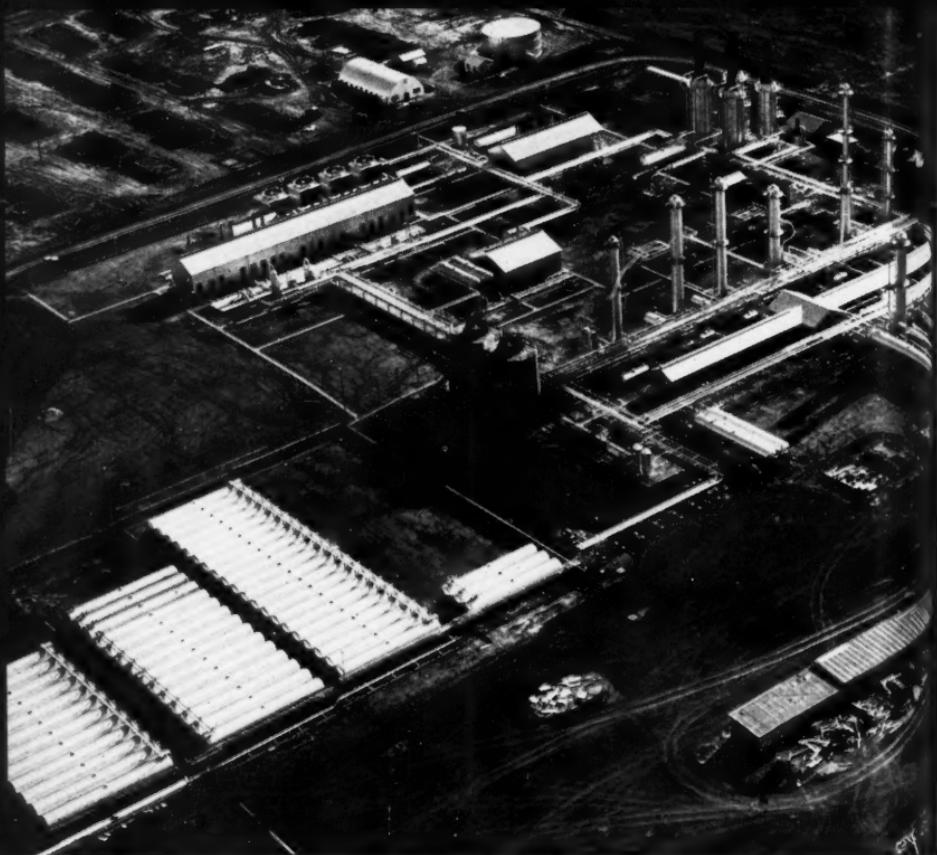
## Gets Unpleasant Welcome But Likes Texas Anyway



L. W. GEHRING

L. W. Gehring, formerly manager of the Columbus, Ohio office plant of Verkamp Corp., recently moved to Dallas to manage Dallas Butane Gas Co. While in Ohio Mr. Gehring was secretary-treasurer of the Ohio Liquefied Petroleum Gas Assn.

His office is located at 499 West Commerce St., Dallas. Gehring states that the LP-gas business in the Southwest is somewhat different from that conducted in the Eastern states. He likes the Southwest though in spite of the fact that his car was stolen from in front of his apartment right after arrival in Dallas.



Aerial view, looking southwest, showing bulk storage tanks for natural gasoline and LP-Gas (left foreground), with compressor building upper left background and distillation and fraction equipment in upper right.

## Mid-Continent Joint Processing Plant Will Extract LP-Gas from Rich Field

ONE of the most extensive and unique gas processing projects in the Mid-Continent—"The Garvin County Plants"—has been installed as a joint conservation venture by five companies holding substantial in-

terests in "The Golden Trend Area," which comprises Oklahoma's newest major oil and gas producing section.

The companies which have joined in this project are The Carter Oil Company, Cities Service Oil Company,

The Texas Company, J. E. Crosbie, Inc., and Warren Petroleum Corporation. The latter corporation was chosen to supervise construction and to operate the project.

The development of The Golden Trend Area has progressed through the discovery of a number of individual oil pools, several of them not being large enough to support independently a natural gas processing plant on a sound economic basis.

The Garvin County Plants accordingly consist of a large central plant at Maysville, and two remote compression and absorption plants, one located at Antioch and the other at Lindsay. The project was so designed, however, that the three plants operate as one major unit to process gas from the Antioch, Elmore, Lindsay, Maysville, New Hope and Wayne pools.

This unit operation is achieved by continuous circulation of the absorption oil between the Antioch and Maysville plants, a distance of approximately 7½ miles, and between the Lindsay and Maysville plants, also a distance of 7½ miles. The rich absorption oil from both the Antioch and Lindsay plants is commingled with the rich absorption oil from the absorption section of the Maysville plant for processing through the distillation section of the latter plant.

The magnitude of this unit operation is evidenced by the fact that:

1. Approximately 200 miles of underground pipelines, ranging from 2 to 30 inches in diameter, were required for gas gathering, gas injection, residue gas, oil, water, gasoline and liquefied petroleum gas loading lines.

2. A total of 21,200 horsepower was installed to handle in excess of 80 million cubic feet of gas per day from approximately atmos-

pheric pressure to 760 pounds absorber pressure, and an additional average of 25 million cubic feet of residue gas per day for reservoir injection at pressures up to 2400 pounds.

3. Approximately 8655 gas engine horsepower is required to drive such units as electric generators, lean oil pumps, water system pumps and plant vapor compressors.

4. Some 400,000 gallons of water are required daily despite the fact none is used for steam generation, and air cooling has been employed to the fullest extent.

5. Total liquid product recovery, at maximum efficiency, will exceed 300,000 gallons per day.

Pressure storage tanks having a total capacity of 1,900,000 gallons serve as plant storage of various vapor pressure natural gasolines, butane and propane. Electrically-driven centrifugal pumps can deliver the three products simultaneously to a 38 unit tank car loading rack located approximately two miles from the Maysville unit. Tank truck loading facilities are located outside the fence adjacent to the storage tanks. Electrically driven plunger type pipeline pumps deliver natural gasoline to two pipelines at specified times.

## Pyrofax Names Walter Naumer Division Vice President

The Pyrofax Division, Union Carbide & Carbon Corp., New York, has announced the appointment of Walter A. Naumer as Division vice president. The appointment became effective Jan. 1.

Other new Pyrofax appointments include: R. E. Roberts, manager, F. W. Frost, sales manager, and J. A. Ackley, assistant sales manager.

# HOW TO SEL



1. THE INITIAL INQUIRY~DON'T LEAVE  
UNTIL YOU HAVE THE COMPLETE APPLI-  
ANCE PICTURE.

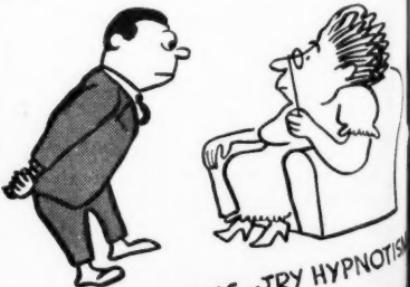


2. GET TO KNOW THE FAMILY

by Dalton

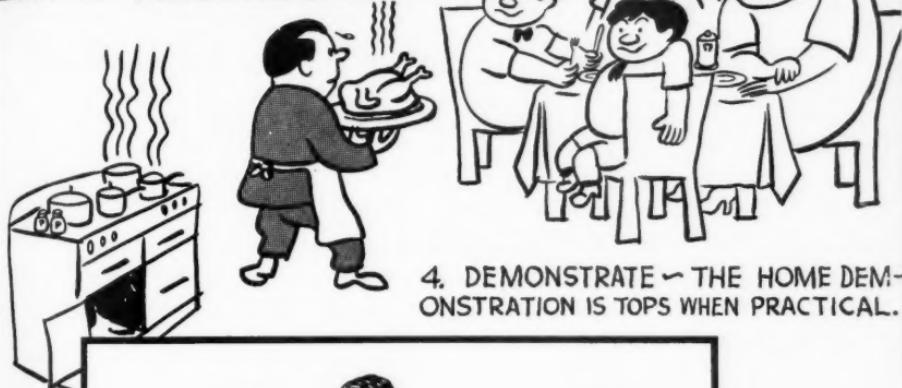


3. TOP DRAWER STRATEGY  
IS TO GET THE APPROVAL  
OF THE HOUSEWIFE.



6. WHEN ALL ELSE FAILS~TRY HYPNOTIS

# APPLIANCES



4. DEMONSTRATE — THE HOME DEMONSTRATION IS TOPS WHEN PRACTICAL.



5. THE QUIZ SHOW — KNOW THE ANSWERS, ONE MISS AND YOU'RE OFF THE AIR.



7. SALE CLOSED — ACTION SHOULD BE IMMEDIATE!

**From an Insurance Standpoint—**

## **What's the Matter with the Liquefied Petroleum Gas Business?**

It may not seem to the casual observer that much progress has been made during the last few years toward the acceptance of LP-Gas businesses as insurance risks. While I will admit it has been slow I do feel that very specific progress has been made. Although the problem hasn't been solved, we have gotten at the root of it. It never was a problem that could be solved by the insurance industry, although insurance research bureaus, safety engineers, underwriters, brokers, and claim men have proved to be most helpful. Still, 90% of the burden must necessarily fall on the shoulders of the individual liquefied petroleum gas operators and their equipment and appliance suppliers.

The question: "What's the matter with the LP-Gas business from an insurance standpoint?" could be answered very abruptly. You have an explosive product which in itself and in its natural habitat is harmless. With men and machines you undertake to harness this product and put it to beneficial use . . . that's where the trouble lies. Insurance records are full of facts and figures relative to failure of men and machines.

By ROBERT N. CARY\*  
Marsh & McLennan, Inc., Chicago

There are many in the industry who would very quickly want to transpose the question above and ask "What's the matter with the insurance business from a liquefied petroleum gas standpoint?" It is a fair question, and should be answered by an insurance agent who is not only an agent of the company but an agent of the insurance buying public and whose business it is to provide protection on a fair basis for the mutual benefit of both parties. The insurance industry is not unaware of its obligations to liquefied petroleum gas operators . . . but they have far larger obligations which must precede any moral obligation to any particular group.

Insurance companies are owned by the general public in nearly all instances. A mutual is owned by its policyholders who often are bound by their contracts to pay an additional premium in the event of insolvency of the company. In a reciprocal exchange members are assessed to pay each other's losses. Stock companies are nearly always owned by large numbers of stockholders. The first obligation is the protection of the public interest.

\* Talk before annual meeting of Minnesota Petroleum Gas Assn., St. Paul.

Secondly, is the protection of stockholders or others with a financial interest in the solvency of a company. Officers and underwriters of insurance companies are "trustees" of private money.

Every assumption of liability must be weighed and undertaken only after due consideration of this fact. Many years ago the legislatures of the various states established state insurance departments with broad authority over all companies in respect to underwriting practices, policy forms and in many instances rates. If an insurance company were to freely write liquefied petroleum gas business and assume an undue amount of liability in relationship to its working capital, it would be inviting investigation by state insurance departments and would very likely lose its license.

#### Risks vs. Dollars

This very thing happened a short time ago . . . a company was closed up by a state insurance department simply because of the amount of LP-Gas exposure assumed, coupled with risks in other lines similarly undesirable. Remember, insurance companies are not to be blamed for conditions which have existed in the LP-Gas industry. They regret the circumstances every bit as much as you do, for they are interested in serving the industry, and, frankly, they are interested in the industry's dollars.

Do you want to know what is wrong with the liquefied petroleum gas business from the insurance standpoint? There is a great deal

PROGRESS HAS BEEN MADE toward the acceptance of LP-Gas operators as insurance risks. But still the normal insurance procedure for new business is reversed. The operator must go to the insurance man and prove his case.

Robert N. Cary, in the accompanying article, mentions the following as sufficient proof to win your argument:

1. You have a definite program of employe training.
2. Your housekeeping is good. (Specific violations noted most frequently are insufficient clearance, dry grass, and lack of proper fencing.)
3. You are well supplied with fire extinguishers.
4. You own an explosivemeter. (Mr. Cary considers the soap sud methods of leak testing as inadequate for large installations.)
5. You are an active member of an association.

. . . but nothing that cannot be corrected by the operators, themselves. Not until the industry proves that it has come of age, recognizes the explosive qualities of the product, eliminates unqualified personnel, and recognizes and refuses to use unsafe equipment and appliances can it expect acceptance of its insurable hazards to be meshed in with those of other industries.

What are we going to do about the situation? I repeat that definite progress has been made. The association members have been taking definite steps in the right direction. Many have adopted the code of safe

practices promoted by one of the national associations. In many states, associations have assisted in the drafting of legislation placing certain controls in the hands of competent authorities.

There is a definite question as to how far it is necessary to go with governmental regulations. I do not know that it is necessary or desirable to license every man in your industry. I do know that this suggestion can well be thoroughly discussed and carefully considered.

#### **Alertness is a Must**

I know of an instance involving one of your members where a new employe was thoroughly trained and assigned to a tank truck. One of his first deliveries was to an elementary school which housed 200 children. The controls were not familiar to the driver and he refused to make delivery until his employer made an inspection. It was found that the controls were not of the right type.

Subsequently it was found that the heating contractor had never installed a liquefied petroleum gas furnace before and on examination, a representative of the manufacturer of the controls agreed he wouldn't have that particular installation in his own house. The equipment was condemned and at a cost of \$80 a spring loaded magnetic valve control, from the same manufacturer, was installed to insure 100% safety. The alertness . . . and training . . . of this driver had possibly prevented a serious accident.

Possibly you should have a record

of all installations with an annual inspection. That's an expensive suggestion but it has been done. I think that the idea has merit and should be carefully considered. From an insurance man's viewpoint, a customer's statement in your files acknowledging that an inspection has been made, might be half the defense in the event of an accident.

Normally an insurance agent goes to the businessman well prepared to sell his services. The tables are turned in LP-Gas and many dealers find it necessary to go to the insurance companies. Why not take a leaf out of their book? Why not be prepared to convince them that each dealer knows his own business, and thereby impress them with the desirabilities of accepting him as an insured? I can give some suggestions; I know the things the insurance inspector will look for.

#### **Integrated Training**

The biggest hazard is the human element, and therefore, the first question is, how do you train your employes and how do you keep them trained? If you are a small operator in a small town location, it may not be practical to you to establish a school. But why not work through your association on a regional basis and arrange for several dealers in a given territory to pool resources? Suppliers of gas, representatives of appliance manufacturers, possibly a representative of the state fire marshal's office, will be glad to cooperate. A central location could be selected and a weekly meeting set up, with a speaker for each meeting. There

should be no trouble setting up six or eight constructive meetings. Even without outside speakers, there is a lot to be learned from each other.

The housekeeping at LP-Gas company premises is very important and if an insurance inspector report shows it to be in poor condition the dealer is considered a poor risk. A common fault is dry grass. Obviously ample clearance should be provided at all times. This may sound elementary, but it is easily proved that many operators are guilty of this glaring omission of common sense.

#### Insurance Prerequisites

An insurance company would insist that your loading platform and yard be completely enclosed with a cyclone fence. If it is necessary for the insurance company to insist upon a fence on an assured risk, it is more necessary for an operator's protection to fence an uninsured risk.

Fire extinguishers should be available in adequate sizes for every building and every truck. I wonder how many dealers own an explosivemeter? It should be standard equipment in every office of every operator. Testing for leaks with soap suds in large systems where there are many connections is not fully satisfactory.

These are just some of the basic suggestions and I think it would be possible to secure insurance company inspection of individual premises even though the insurance company may not entertain the idea of writing coverage.

Any operator who hasn't time or the means to carefully select and thoroughly train his employes should not be allowed to do business. Nor do I think an operator who, for any reason, is not a member of an association, and is not actively doing his part to solve common problems, is worthy of consideration by insurance underwriters.

The state fire marshal is an excellent source of "know how." The legislature can pass laws until the statute books are full and the insurance business can refuse to provide coverage unless you follow every rule . . . but only you can prevent accidents. The growth of the LP-Gas industry has been phenomenal, and testifies to the courage and ingenuity of the American small businessman. It has been hampered in more ways than one by carelessness of a very few. Each dealer should be sure that he doesn't injure his fellow operators by operating without thorough safety practices.

#### J. E. O'Hagan, Former Grayson Executive, Passes Away

James E. O'Hagan, 45, former vice president of Grayson Controls Div., Lynwood, Calif., died Jan. 10 of a heart attack in his San Marino, Calif., home.

Mr. O'Hagan was associated with Robertshaw-Fulton Controls in the East and came to the Grayson division in 1941 from Chicago. In 1947 he left Grayson to become associated with Allied Records Manufacturing Co.



Marion Husi, expert home economist and author of  
**"The 1-2-3 of Homemaking"** says . . .

"LP-Gas saves you the most where  
your housekeeping is hardest!"

LP-GAS COOKING WILL SAVE YOU ENOUGH  
TO PAY FOR YOUR WINTER LP-GAS HEATING NEXT WINTER!

According to the U. S. Bureau of Standards, it takes 110 kilowatt hours of electricity to do the same amount of cooking that you can do with nine gallons of LP-Gas. If you have noticed your electric bill lately, and the price per kilowatt hour, you will save approximately \$3.30 per month on cooking alone. . . . That's a real saving!

It costs less to equip your home with a beautiful new LP-Gas Range and the necessary storage equipment, too. See our special offer on a wonderful new Magic Chef range and a big 300-gallon tank advertised inside.

Read what Mrs. Hurst, author and home economist, says about clean, cool and convenient LP-Gas, then send in the coupon and let us explain how you, too, can enjoy LP-Gas.

Sincerely,

H. Greenwood

F. H. Greenwood

**GREENWOOD & CO.**

Your Friendly LP-Gas Dealer  
Butane - Propane Gas - Systems - Appliances  
208 W. CALIFORNIA PHONE 688  
GAINESVILLE, TEXAS



## AGA Laboratories Save Time For Appliance Manufacturers

In order to meet the heavy demands of an unprecedented gas appliance test load, the AGA Testing Laboratories have inaugurated several new steps in their testing procedure. Among these steps is a new policy on the shipment of appliances for test. Appliances are now being accepted on a reservation basis instead of being tested in order of receipt at the Laboratories.

Under the new arrangement, manufacturers advise the date when they expect to deliver their appliances at

the Laboratories. The earliest test date available is assigned and the manufacturer requested to have the appliance on hand one week prior to the tentative date. In case of failure of the appliance to arrive on schedule, the reservation will be lost and a new date set.

Benefits expected from the plan are that storage space at the Laboratories will be reduced and from two to four weeks will be saved, as it will not be necessary for appliances to stand in line awaiting test. This will give manufacturers more time for development work before shipping equipment to the Laboratories with less likelihood for failures when tests are made.

More manufacturers can be taken care of at the Los Angeles Laboratories as a result of the expanded facilities at that location. A number of manufacturers have already availed themselves of the opportunity of shipping appliances to the Pacific Coast Branch.

Among other important steps for providing the best possible service, the Laboratories have appointed a chief methods engineer to bring about closer coordination between the formulation of gas appliance standards and the translation of these standards into test methods employed in the approval program.

During the second quarter of 1949, appliance testing operations continued the upward trend of the past few years and reached a new all-time peak. This increased activity is believed to be due to a number of reasons—keener competition resulting in increased development work, design changes to reduce manufacturing costs, availability of gas for heating over wider geographical areas, and new heating methods developed to meet new building designs.

## Promotion Piece



**Fred Greenwood, Greenwood & Co., Gainesville, Texas, is offering a "Magic Chef" range, plus a 300-gallon storage tank on a lease basis and enough gas to cook all year for \$251.50.**

Charges are broken down as follows: \$1 per month for 36 months for lease of tank; \$169.50 for the range; \$19 for the installation; \$27 for gas.

Greenwood promotion also points out that it takes 140 kilowatt hours, according to U. S. Bureau of Standards, to do the same amount of cooking that can be done with nine gallons of LP-Gas—and look at the saving! You'll save \$3.30 per month alone, on cooking with LP-Gas.

# THERE'S MONEY IN HEATING!

... WITH THE RIGHT LINE OF EQUIPMENT

THE NEW  
IMPROVED

UNIT  
HEATERS

GAS-FIRED

*have everything*

SMART  
APPEARANCE  
NEW DESIGN  
FEATURES  
NEAT

PROVENANCE  
LONG LIFE  
CONSTRUCTION  
SERVICEABILITY  
SER

A. G. A. Approved for all gases including L. P.

## Demonstrations Best Way to Sales Says Florida Gas Dealer

**E**D BASS, manager of Fryar's Appliance Store, Miami, Fla., declares that the general public entertains a "from Missouri" attitude. It likes to be shown.

"Talk about the capabilities of any appliance all you like," he said, "but a practical demonstration of what it will do is your biggest sales factor. We train our employees to start the show-off for a prospect as promptly as possible, and to make it thorough."

At Fryar's a model washing machine goes merrily ahead with the

By MINNETTE LAKE WARREN

family laundry in full view of passers-by. "We sell many gas water heaters for these washing machines," remarked Bass. "They represent one of our most popular merchandising items. The increasing popularity of bottled gas has boosted our sales. Bottled gas, already a big factor in the appliance industry, is surely destined to play an outstanding role in our business."



Ed Bass demonstrating the merits of a gas stove to a customer at Fryar's Appliance Store, Miami, Fla.

Fryar's has been doing business at the same location for 15 years. E. P. Fryar, owner of the company, spends a great deal of time visiting other dealers, picking up ideas, and choosing the finest appliances available for his own concern. He wants only the best.

The Fryar display room is about 100 feet square. Every inch of available space is taken. There is an impressive array of stock, with a line of ranges, gas heaters, and facilities for garbage disposal.

#### Four Delivery Trucks Kept Busy

The Fryar concern does a big credit business, selling all appliances on easy terms. Four delivery trucks are kept busy constantly, while a force of eight outside salesmen gather in the orders.

"We have a complete repair shop, and give expert service on all appliances," stated Mr. Bass. "Such a repair department is a valuable asset to a business."

While Mr. Bass is a firm believer in newspaper and radio advertising, he is convinced that nothing can take the place of accurate and thorough sales training. Customers must be taught everything possible about the appliances they buy. This saves misunderstanding, and eliminates future complaints. A customer should be thoroughly schooled in the most approved method of operating his purchase.

"A dealer who fails to instruct his customer how to get the best results from his new gas water heater or range is simply paving the way to later headaches," Mr. Bass said. "Demonstration and instruction—they go hand in hand; and nothing will take their places as trade-builders, believe me!"

#### Mid-Continent Service School Set for Kansas, July 24-26

The first service school to be held in the Mid-continent area at the University of Kansas, Lawrence, Kan., is

scheduled for July 24 - 26, according to an announcement from John Knox Smith, field engineer for the Liquefied Petroleum Gas Assn.

Rex Wheeler, representing the southern section of District 4 on the national committee, is heading the committee

working with the university on the plans for the school. Other committee members appointed by Mr. Wheeler include: Fred La Fortune, Warren Petroleum Corp., Preston Grace, White River Distributors, W. A. Schuette, Hausgas, Inc., L. L. Black, Skelly Oil Co., and Homer Devault, Darlingas, Inc.

On Dec. 16 the committee met with E. A. McFarland, of the University of Kansas, to discuss plans for the school. A tentative fee of \$25 was set which will cover board, lodging and the registration fee for the three-day course. The enrollment will be limited to 150 men.

Contact has been made with the Kansas State Agricultural College at Manhattan, Kan., and plans are now under way for the establishment of an annual short course, devoted solely to the use of LP-Gas as engine fuel in farm tractors.

A meeting of the committee was scheduled for Jan. 7 in Manhattan. As yet, the date of the school has not been set but it is expected that it will be held around the first of April.



J. KNOX SMITH

# YOUR SALESMEN NEED A COMPLETE LINE!



Your salesmen will turn in a far greater volume of business and at lower sales cost, if they have a complete line to present at each call.

We manufacture a complete line of butane and propane torches and burners which might make a very profitable companion line for your salesmen.

There is a great deal of additional lucrative business that you can get on your regular calls on plumbers, painting contractors, roofers, sheet metal shops and general industrial plants. If they buy butane or propane, they must have torches and burners to use it. We invite your inquiries.

## RANSOME COMPANY

Designing and Constructing Engineers

4030 HOLLIS STREET

EMERYVILLE, CALIFORNIA

*Ransome*

# Never Told a Customer "No"

SEVERAL years ago L. H. Dowdy started his San Diego Liquid Gas and Appliance Co. at 3641 Rosecrans Blvd., San Diego, Calif. A little office and one truck took care of the business.

Today this firm operates six trucks in San Diego county. Average monthly wholesale bills for gas, alone, run between \$27,000 and \$35,000.

There are three reasons for this young firm's growth:

1. Starting after war, Mr. Dowdy and his son, Lewis H. Dowdy Jr., did not tell a customer, "No, I can't get you a hot water heater." They scoured the factories and wholesale distributors for appliances. It took time, effort and gasoline bills to visit factories, or to telephone them, but San Diego Liquid Gas managed to get appliances.

"During our first year in business," says Mr. Dowdy, "we sold an average of five to six liquefied gas hot water heaters each day. We bought them by the carload."

Similarly the young firm went to extra trouble and expense to obtain LP-Gas lights for its customers. But it got them. As a result, San Diego Liquid Gas and Appliance Co. picked up many customers through word-of-mouth advertising.

2. This new firm offers 24-hour service anywhere in the county. Again, since this postwar firm did not deve-

lop war-boom independence, it supplied service anywhere at any time. If a customer needed gas, he'd get it from the elder or young Dowdy even Sunday.

3. Finally, San Diego Liquid Gas gives each of its customers a chance to apply his lease money on the tanks toward the purchase of the equipment. There are no strings attached. A clause in the contract provides for the purchase of equipment at a stated price. At any time the deposit can be applied toward the purchase of the tank.

"Only one customer bought a tank because he wanted to move it," Mr. Dowdy reports. "But the psychology of our aboveboard method builds good will for us. Instead of tying up a customer with a tricky lease, we get his business on the basis of service."

These are the factors in the rapid growth of San Diego Liquid Gas and Appliance Co.

L. H. Dowdy, San Diego Liquid Gas & Appliance Co., checking a customer tank before delivery.



# Efficient...

that's the word for these modern heating units

by AMERICAN-Standard



**BUDGET** Automatic Storage Water Heater — Has fuel-saving cast iron blue flame burner and safety controls. Center flue with baffle insures quick recovery. Mineral wool insulation between heavy galvanized steel tank and trim white enameled jacket prevents heat loss, increases efficiency. Comes in 20, 30, and 40 gallon capacities.

■ American-Standard Heating Equipment for liquefied petroleum gas has achieved an outstanding record for efficiency. Backed by research and production facilities that are second to none, American-Standard products are noted for satisfactory performance, attractive appearance, and sturdy construction. That's why they are so easy to sell . . . that's why they give such lasting customer satisfaction. For information about the complete line, contact your Wholesale Distributor. **American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.**



**SENECA** Winter Air Conditioner — A quality unit built for long service. Has copper-bearing steel heating element which resists corrosion and rust. Baffles in large radiator conduct gases through three passes, heating entire radiator thoroughly before gases enter flue. Dependable cast iron ribbon burner saves fuel. Comes in four sizes.

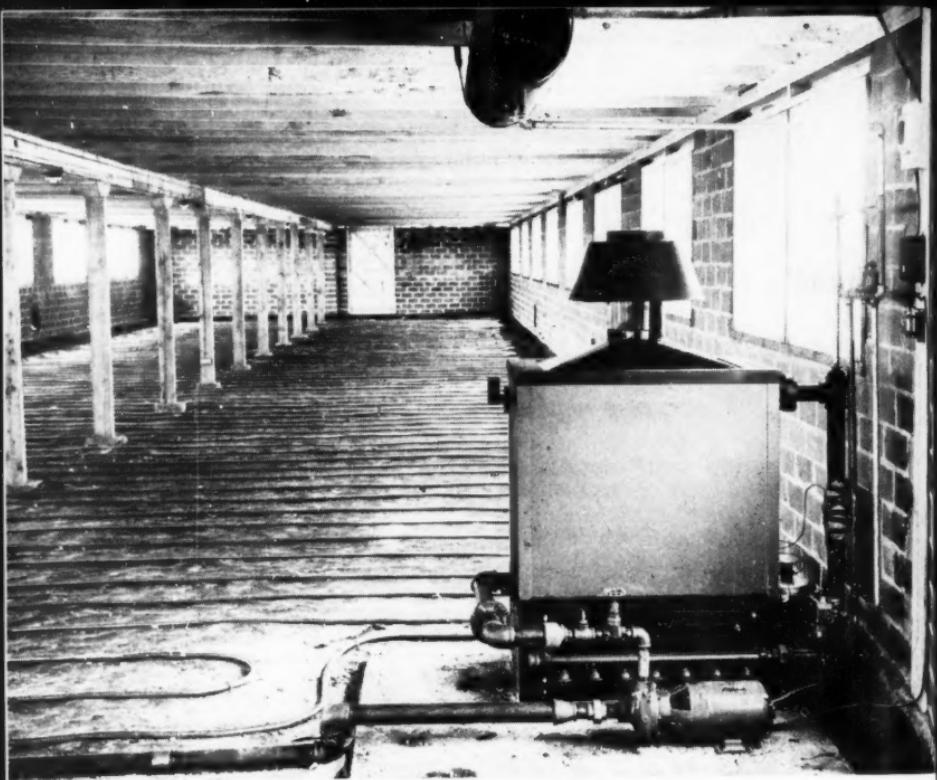


## AMERICAN-Standard

First in heating . . . first in plumbing

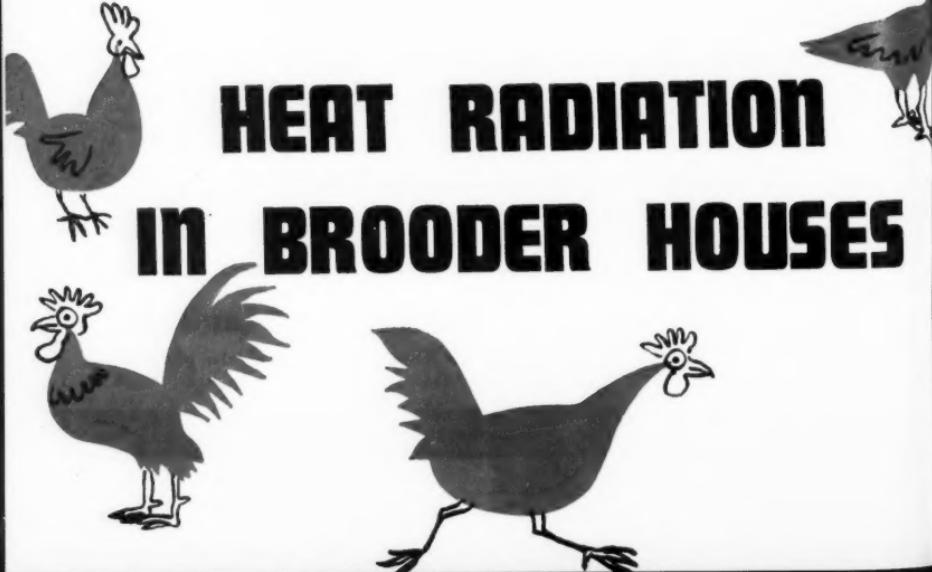
Serving home and industry

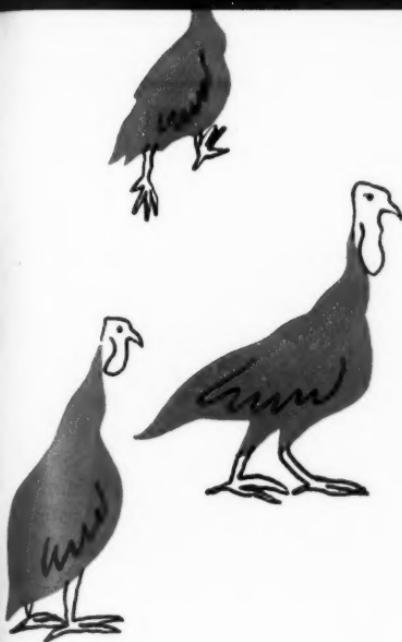
AMERICAN STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILER • ROSS HEATER • TONAWANDA IRON



Heat radiation setup in brooder house covered by the accompanying story.

# HEAT RADIATION IN BROODER HOUSES





By CRAIG ESPY

**H**EAT radiation in brooder houses is a new application for LP-Gas with Jack Gorum, owner of Ozark Butane Co., Siloam Springs, Ark. He and his son, Charles Gorum, who recently graduated from University of Arkansas, designed and installed such a brooder house on the farm of Louis Perona, of Tontitown, a few miles out of Siloam Springs. Henceforth some of Arkansas' famous broilers will grow to size in heat radiated atmosphere.

This installation is presently operating on a small natural gas well located on the farm, but propane has been installed for standby. It is generally thought that the plant

will operate more on propane than on natural gas.

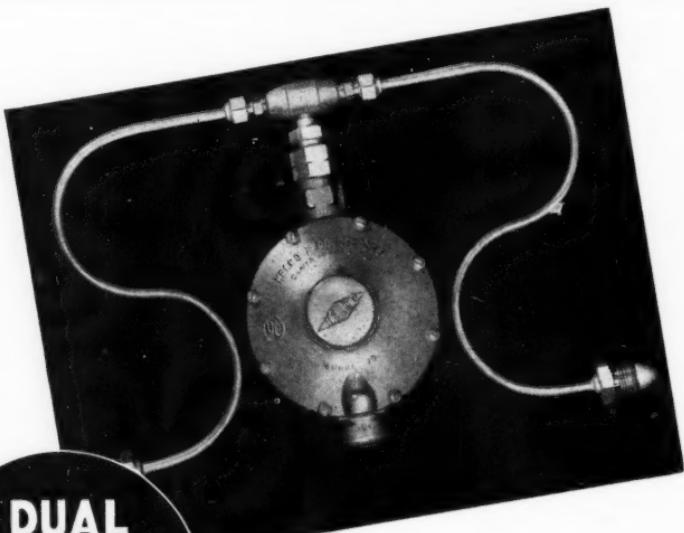
The new type brooder house is 204 feet long by 30 feet wide. It faces north and south and two-thirds of the wall space consists of windows. This gives sunshine over the entire floor from sun-up to sun-down.

The building has a flat roof plumbed to 1/16th of an inch. Constructed perfectly level, the roof carries three inches of water over it all the year round. In summer the water acts as a cooling agent. Ice forms in winter providing an insulation.

After designing the building, Charles Gorum sent the drawings and specifications to the University of Wisconsin for suggestions and approval. This university has been

Ozark Butane Co. building, Siloam Springs, Ark.





## DUAL BOTTLE SYSTEM

### *Specifications*

Capacity—100 cu. ft. per hr. or more.

Reduced Pressure—Std. 11 in. W.C.

Inlet Connections—At manifold are 5/16 SAE flare for pigtailed having P.O.L. cylinder end.

Outlet Connections—1/2 in. female pipe.

Built-in Relief Valve.

The HELCO Dual Bottle System is a combination of regulator, manifold-check valve and pigtailed that offers large capacity and dependable operation at a very low cost.

The regulator is designed specifically for good cold weather performance. It is extremely light weight, compact and has attractive finish.

T-Block is leak proof. The O-Ring design makes it dependable at all times—under all conditions.

*All HELCO LP-Gas Equipment  
is U.L. Approved*

**<HELCO> PRODUCTS CORPORATION**

2041 COLORADO AVENUE



SANTA MONICA, CALIF.

one of the pioneers in heat radiation.

The pipe in the building is laid on a clay base. Tar paper was placed over the pipe. Then it was covered by slightly more than two inches of concrete.

Hot water for heat radiation is provided by a 385,000 Btu American Radiator boiler. This stands on the right wall in the center of the building. A pump handling 40 gallons per minute circulates the water.

Inlet headers graduate from  $1\frac{1}{2}$  inches at the boiler to  $\frac{3}{4}$  inch, which is the size of the coils. The return lines on each side graduate from  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches and are joined to a 2-inch return header. Twelve sections of  $\frac{3}{4}$ -inch copper tubing (5210 feet in all) complete the system. Balance valves regu-

late the amount of water going into each section of coil.

A thermostat tapped into the line in the rear of the boiler controls the heat of the water. Due to the graduation of pipe the first water out of the boiler is the last water back to the boiler. This permits only a variation of  $1^{\circ}$  temperature between the center and two ends of the building. A thermostat located 9 inches off the floor on one of the posts in the center tier of the building maintains a  $90^{\circ}$  temperature throughout the building. A gas regulator also located at the back of the boiler regulates the pressure of the gas.

A surge tank was installed above the boiler. This releases any air that may accumulate in the system.

Two 1000-gallon McNamar pro-

Hot water piping system under concrete.



pane tanks have been installed to fuel the job. As many as 10,000 chicks can be accommodated in the building.

With Benton county, Arkansas, in which Siloam Springs is located, being the second largest broiler producing county in the world, Ozark Butane serves many brooder house installations. Conventional type brooder stoves are used in most of these installations.

Forty-eight brooder stoves have been installed in a brooder house 50 feet wide by 298 feet long at Summers, Ark. Two 1000-gallon propane tanks serve this installation. Thirty brooder stoves have been installed in each of two brooder houses, 24 feet wide by 500 feet long, located at Hyful, Ark. Two 1000-gallon tanks are installed there. One operator in Bentonville, Ark., has installed 76 brooder stoves. Service is provided from four 1000-gallon propane tanks.

In installations of this type, the company has found that it costs two cents a bird for LP-Gas to bring baby chicks to 12 weeks, 3 lbs. weight, at which they are marketed.

John Brown University, located in Siloam Springs, Ark., is another large user of LP-Gas, with 1500 students in attendance. LP-Gas is used for cooking, heating water and house heating. It also provides heat for John Brown University airport and for the John Brown experimental farm.

This modern gas also provides fuel for cooking purposes at Gypsy

Camp, a girl's camp located in the hill country, and for a Presbyterian camp. Fuel is also provided to canning plants, laundries and other commercial plants.

Ozark Butane operates 10 trucks and two 5078-gallon transports.

## Customers Get Special Home Demonstrations, If Requested

A good example of the cooperation possible with the GAMA Old Stove Round-Up campaign, at the local level, was furnished recently by Protane Gas Service Co., Erie, Pa.

Protane Service, realizing the worth of the GAMA promotional effort varied in direct proportion to the local effort, launched an integrated program built on the theme "Protane's old stove round-up offers homes beyond the mains the convenience of a gas kitchen."

Spotlighted among the company's special offers to induce range-buying was its plan of making personnel and portable equipment available for home demonstration. If customers were interested but found it inconvenient to visit the company's showroom, then the showroom went to them—and the home service director prepared a meal on an LP-Gas stove by way of demonstration.

In addition, a full line of LP-Gas ranges was kept in operation in the Protane showroom—prospects could judge the efficiency of the range brand of their choice against the others engaged in similar cooking tasks. Protane backed up these promotional salutes with full-page newspaper ads, pointing out that the company would accept any old stove—coal, wood, or oil—in down payment for a new, gas range. A special payment plan was also announced in the ads, providing for payments of \$9.74 for 24 months.

the  
ter-  
l to  
ther

ucks  
orts.

ome  
ited  
ation  
stove  
level,  
Gas

worth  
varied  
l eff-  
rogram  
stove  
the  
gas

any's  
uying  
l and  
ome  
re in-  
ent to  
then  
and the  
meal  
emon-

o-Gas  
n the  
could  
brand  
ers en-  
Pro-  
al sal-  
ads,  
would  
od, or  
7, gas  
was  
viding  
onths.

# GARLAND WINS



Illustrated is the Famous Garland  
Restaurant Range Model 83

## **Garland costs less to buy —less to operate!**

Largest production in the industry enables us to keep prices down—*below comparable models*. Engineering and sound design assures lower operating cost.

### **CHOICE OF TOP SECTIONS TO SUIT YOUR NEEDS**



**Only GARLAND Commercial  
Equipment has received the  
Merit Award of the  
American Society of  
Industrial Engineers!**

Now, more honors for Garland—leader by a wide margin in sales of Commercial Ranges!

Unsolicited, the American Society of Industrial Engineers has conferred on Garland Commercial Cooking Equipment its official Award of Merit for Excellence in engineering and manufacturing. *No other range manufacturer has received this coveted seal.*

Thus, this engineering society confirms what thousands of Garland dealers and many more thousands of Garland users have long known—*Garland has no equal in its field!*

*All Garland units are available in stainless steel and equipped for use with manufactured, natural or L-P gases.*

# **GARLAND\*** *THE TREND IS TO GAS*

FOR ALL  
COMMERCIAL COOKING

**Heavy Duty Ranges • Restaurant Ranges • Broilers • Deep Fat Fryers • Toasters  
Roasting Ovens • Griddles • Counter Griddles**

**PRODUCTS OF DETROIT-MICHIGAN STOVE CO., DETROIT 31, MICHIGAN**

\*REG. U. S. PAT. OFF.

# Serving Customer Interests Promotes Best Gas Business

**H**OMER J. Cokely, LP-Gas dealer of Chickasha, Okla., operating under the name of the Cokely Insulation Co., sells insulation materials to his gas customers.

He carries on a busy 1-truck liquefied petroleum gas business under the name "Automatic Butane Co."

"It is true that a good job of home insulation reduces the customer's gas bill," said Mr. Cokely, "but my chief objective is not to sell him the maximum amount of fuel. If his house is warmer than it was when he burned coal or wood, he is inclined to give all the credit to LP-Gas, which, with the aid of the insulation, keeps him comfortable at a lower cost than his former output for coal or wood. Then, too, my insulation sales bring in a nice addition to my revenues, and installations can be carried on largely in summer months when LP-Gas sales are lowest."

Automatic Butane Co., with its owner and truck driver, serves four routes, each 20 miles long and extending four directions from Chickasha. Principally, farmers are on these routes, but there are also two rural school houses, one served by four supply tanks of 1000 gals. each, the other by two tanks of the same size.

## Operates On Small Storage

Operating on small capital, Mr. Cokely has made only a small investment in bulk storage. He has but one 1000-gal. tank at his headquarters in Chickasha. But he makes frequent trips to a nearby Cities Service refinery for his LP-Gas. In most cases he delivers this directly to his cus-

By O. D. HALL

tomers from a 910-gal. delivery tank truck. The small bulk supply at his headquarters is maintained for emergency purposes and to fill bottles.

Aside from the large tanks at the school houses, he has a few larger capacity customer storage tanks on his routes. Most of them do not exceed 250-gal. capacity. He makes it a point to visit each tank installation every 30 days and makes emergency calls, night or day.

The dealer recalls his success during January and February 1949, when record-breaking snow and ice storms clogged and slicked the highways. He



Owner Homer J. Cokely, at right, and J. W. Massey, driver of delivery truck pictured in background, filling the 810-gal. truck tank from a storage in right foreground.

# REGO LPG OUTFITS....

....they're the best for Your Customers—  
—and you! \*

When it comes to LPG Outfits for bulk delivery and portable cylinder systems, RegO is "just what the Doctor ordered" for your customers. And when you prescribe RegO, you can do so with the assurance that your customers will get the dependable and trouble-free performance which they expect and to which they are entitled.

**REGO Multivalve Outfits** for underground and above ground bulk delivery systems provide low installation costs and reduce the hazard of leaks. *Only the minimum number of individual connections to the container are required.*

**REGO Manifold Outfits** for portable cylinder systems assure a dependable and continuous supply of gas to the user.

These outfits are assembled, rigidly tested, packed in re-shipping cartons and are ready to install in the field.

\* *and you!* With RegO-designed equipment you virtually do away with those costly middle-of-the-night service calls which eat into your profits. And, what's more, you have satisfied customers who become ready buyers for the additional appliances that bring about increased gas loads.

Yes, RegO is best for your customers—*and you!*

PIONEER AND LEADER IN THE  
DESIGN AND MANUFACTURE OF  
PRECISION EQUIPMENT FOR USING  
AND CONTROLLING LP-GASES



The **BASTIAN-BLESSING**  
4201 W. Peterson Ave., Chicago 30, Illinois

remembers particularly the night of Jan. 21 when he slipped off the highway three times and stayed up all night to install a 150-gal. butane tank to meet the emergency needs of a farmer. This customer had been out of wood and coal for four days and had been burning corn cobs and "cow chips" to keep his family from freezing.

At another time a natural gas line near Chickasha broke. Mr. Cokely came to the rescue of a number of rural dwellers, supplying them with aboveground tanks and bottles filled with butane. He kept one 65-gal. butane tank located on a hill from freezing by wrapping it in building paper.

"There was no time or opportunity to bury tanks in the freezing temperatures of that trying period and I did not have a single tank freeze up on a customer," Mr. Cokely said pridefully.

## Rocky Mt. School Stresses High Altitude Operations

The second annual Rocky Mountain Empire LP-Gas service school, scheduled for Denver, Colo., Feb. 6-8, will combine comprehensive instruction by leading industry authorities with actual demonstrations and question-and-answer periods. It can serve either as a refresher course for older employees or as a thorough training school for new employees.

Although the



J. C. CRAWFORD

school has been arranged for LP-Gas servicemen in the mountain states, it is open to everyone engaged in the industry. Non-members as well as members of the LPGA and the Colorado LP-Gas Assn., are invited to enroll. J. C. Crawford, Colorado executive vice president, is arranging local details.

### Wide Spread in Program

Every important phase of the LP-Gas industry will be covered including: properties of LP-Gas; coordination of regulator and piping; fundamentals of combustion and venting; installation and servicing of ranges, water heaters, and other appliances; electric and pilot generated controls; operating emergencies; space heating; and customer relations.

With regard to the last named topic, students will learn how to provide better customer service, prevent accidents and increase sales. In addition, they will be taught proper methods of adjusting appliances and maintaining operating equipment.

The lectures will be illustrated with various types of exhibits and there will be opportunity for class discussions.

Banquet, entertainment and other social activities will be eliminated and the course will be highly concentrated and designed to equip servicemen and other employes with the know-how that will enable them to do a better job for the customer and the company.

A \$10-fee will cover operating expenses for the school and the cost of reproducing papers and lectures. One copy of the proceeding will be sent to each registrant.

# Easiest, Safest Most Accurate Method

FOR MEASURING L-P GAS



*Distinguished for  
Sustained Accuracy*



Sustained accuracy with safety is the big reason why L-P gas marketers prefer Red Seal for guarding profits the business-like way.

The precisely machined measuring chamber has long been approved as one of the most accurate known measuring devices—and because it has only one moving part, with no distortion due to pressure, it stays accurate longer. To provide complete safety in

handling liquid propane under all pressure conditions, Red Seal L-P gas meters are designed for working pressures up to 250 psi.

The 1 1/4", 30 gpm. Red Seal Compact meter type 1D is ideal for tank truck service. A 2", 100 gpm. meter is also available. Ticket printing registers are recommended for building the best of customer good will. Ask for L-P Gas Bulletin.

NEPTUNE METER COMPANY • 50 West 50th Street, New York 20, N. Y.  
Branch Offices, ATLANTA • BOSTON • CHICAGO • DALLAS • DENVER • LOS ANGELES  
LOUISVILLE • NO. KANSAS CITY, MO. • PHILADELPHIA • PORTLAND, ORE. • SAN FRANCISCO  
Canadian Factory, LONG BRANCH, ONT.

## Traveling Demonstration Signs 'Em Up



Midwest dealers last fall viewed with interest a traveling demonstration of gas-burning plumbing equipment, neatly displayed in a station wagon, and conducted by Bill Sellinger of the Mutual Liquid Gas Co., Inglewood, California.

# SALES SLANTS

## *The Lost Art of Salesmanship*

BY HENRI H. JENNINGS

**A**N honest, call-back-on-the-same-customer year after year salesman belongs to a profession to which any man or woman should be proud to be a member, and one should feel complimented to be so known. This kind of salesmanship is equal in importance, requirements, and general ability to any other profession, regardless of its particular merits. Mere college training, or coaching, by "hot-shot" salesmen does not necessarily produce a salesman who deserves the right to be called such. Either, or both, help perhaps; but the art of real salesmanship requires a great deal more, which is not an assured product of either.

Prior to the war I met many men on the road who were worthy of the honor of being called salesmen, and my hat went off to them. But the lush days as a consequence of the war have helped to make some of the "old boys" soft, and some of the new men in the field have many things yet to learn about the technique of salesmanship.

During the war and the buying splurge immediately following, I was amused and pleasantly pleased with my purchases of men's clothing from a true salesman we shall call John. Clothes were hard to get, as you know, and all a salesman had to do

was show you something that fit. You bought.

John did not do it this way. When he had something, he would phone his prospective customer, invite him to come to the store and see the suit. He would not allow the customer to say that he would "take it." John sold it to him.

### Never Breaks Sales Training

I have listened to John from 30 minutes to an hour sell me a suit, because I like to be sold. I asked him why he gave me, and everybody else, his "song-and-dance" when the suit was actually sold over the phone. He said, "This is for my own security, and to stay in training as a salesman will keep me living when real selling comes back."

I called on John a few weeks ago. He was selling clothes and told me that he was making more money than he had ever made before. Yes, I bought a suit—or rather, he sold me one. And when I need another, I shall see John if possible, and he shall sell to me again.

Recently, statisticians advised that we had a recession caused primarily by buyers' resistance. I think that it was due to the salesman's lack of persistence. We all noticed that after the sales force took up a few notches in their belts and after a few months of tongue-lashing from man-

agement, buyers' resistance began to subside. Prices did not go down much; we are getting pretty much the same price for gas, appliances, and systems as before the buyers' so-called "strike." We simply went to work, and there is the answer.

### Cater to the Family

With a prospective customer, we now spend three hours to our previous one, have dinner with the family, and are calling all the children by their first names before the sale is made. These are only some of the things we did before the war and thought nothing about them. Sales meetings every morning from eight until nine o'clock and night calls seem like old times.

I noticed a cartoon a few weeks ago which portrayed the story. A small child was attending an Easter egg hunt, and the rabbit was running off with a basket of eggs to hide. The child represented the war-made salesman; the rabbit, the prospective customer with orders to place. The child said, "Mamma, why doesn't he bring them to us like he used to? I don't want to hunt them." The art of selling is lost unless you hunt that prospect with the order, you know what to do, and how, when you find him.

Mass production is the foundation upon which the industrial life and the material well-being of our nation depends, but without mass salesmanship that foundation will disintegrate. The price of whatever is to be sold is no guarantee of executed sales. You must have, or must develop, the art of salesmanship to convert and keep your books out of red ink and in black ink.

## There's Room at the Top For a Women, Too

**A**N LP-Gas dealer who "rode the truck" with the company serviceman to learn the business, and took over proprietorship with but a rudimentary knowledge of the fuel, its performance, and how to sell it, is heading into a seventh successful year in Manatee county, Fla.

The dealer is a woman—Mrs. F. A. Harrison—who took over her husband's

Green's Fuel franchise for the county after his death in 1943. It was a tough undertaking; she hadn't even a speaking acquaintance with the industry, and her sole employe, since the war had taken all others, was a serviceman named Jeff Bellamy. He saved the business, according to Mrs. Harrison, by filling the tanks, making installations, and doing all the service work—in addition to teaching her the rudiments of operating practice.

Today, Mrs. Harrison can look back on six years of healthy business expansion, including a boost in the company's worth from \$50,000 to a present \$200,000, and an increase in the number of customers from 400 to 1500.

Following the war, Mrs. Harrison took a partner, J. Lynn Gilmore, because "I could see a great expansion coming, and I knew I could not



MRS. HARRISON

op

the  
vice-  
took  
tor-  
t a  
ary  
the  
rm-  
ow to  
ding  
enth  
er in  
nty,  
is a  
F.  
n —  
ver  
d's  
nty  
s a  
en a  
in-  
ince  
as a  
He  
Mrs.  
nak-  
the  
ning  
rac-  
back  
ex-  
com-  
res-  
the  
to  
ison  
be-  
sion  
not  
News

# ONLY O'KEEFE & MERRITT

## Gas Ranges

### GRILLELEVATOR BROILER

Fast, visible,  
fingertip adjust-  
ment to 5 levels  
makes broiling  
a joy.

### VANISHING SHELF

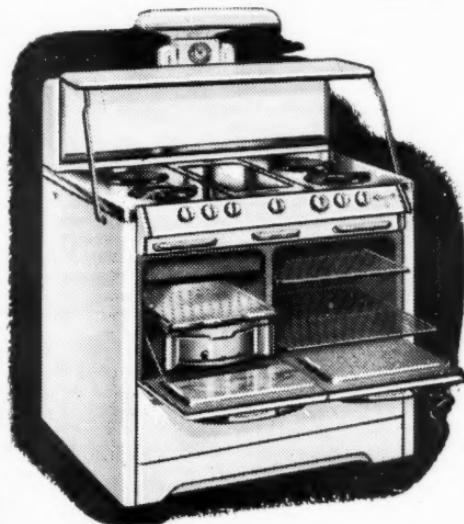
Handy and space-saving when up  
... a beautiful cover for range  
top when down.

### KOOL KONTROL PANEL

Keeps burner knobs  
always cool  
... prevents discoloration.



## HAVE THESE EXCLUSIVE *"Sales-Making"* FEATURES!



Any way you look at it... proved performance... more extra, exclusive features such as the famous Kool-Kontrol Panel, Grillelevator Broiler, Vanishing Shelf... here's the gas range to sell! Your customers *know* O'Keefe & Merritt as being so much easier to cook with! Profit by this recognition... this overwhelming preference for O'Keefe & Merritt's *thoughtful design*. More than 20 models are ready for your showrooms to give your customer the O'Keefe & Merritt model she wants at the price she wants to pay.

O'KEEFE & MERRITT CO. 3700 East Olympic Boulevard • Los Angeles 23, California

FEBRUARY — 1950

handle it all alone." At present, Mr. Gilmore handles the "outside" and mechanical work and Mrs. Harrison is in charge of the business end.

Last year, Mrs. Harrison bought a building on the Tamiami Trail (near Miami) to house offices, display room, repair shop, and equipment. Recent tank purchases have brought the company's storage capacity to more than 100,000 gals.

From the one employee, Jeff Bellamy, who was on the payroll when Mrs. Harrison took over, the total has risen to 10. The company now operates two fill trucks, of 1200-gal. and 1600-gal. capacity, and three pickup trucks.

## Kentucky Association Issues Safety Code

In a move to get overall opinions from Kentucky LP-Gas operators which can be used as a guide to industry thinking — particularly regarding regulatory problems — the legislative committee of the Kentucky LP-Gas Assn. sent questionnaires to the industry on Dec. 1.

Among questions asked are the following: Are you in favor of revising the permit laws for LP-Gas operations in Kentucky? Are you in favor of an LP-Gas inspector approved by an LP-Gas advisory council? Are you in favor of passing regulations forbidding the transporting of gas over the public highway and the installation and hooking of other than 220-lb. cylinders, except by LP-Gas operators having permits? Are you in favor of having the present standards made more complete, and an interpretation of these in language easily understood by laymen, distributed to LP-Gas operators?

The questions were intended to

get a general picture of industry opinion and what is believed to be best for the industry. The legislative committee, headed by J. M. F. Hays, will compile answers into a report which will be submitted to the board of directors at a future meeting.

The code of safe practices adopted by the Kentucky association and addressed to the state fire marshal in the form of a pledge, follows:

1. Butane and propane gases will be stored in and filled into pressure vessels constructed, tested and approved in accordance with National Board of Fire Underwriters Pamphlet 58 or Kentucky Standards of Safety.

2. Storage tanks, consumer tanks and systems and cylinders will be equipped with all necessary regulating and safety devices approved by Underwriters' Laboratories, Inc., or the Kentucky State Fire Marshal; such devices will be checked frequently and kept in proper working order.

3. Automotive equipment, including tank trucks, will be maintained in first class condition.

4. Gas burning appliances, accessories and equipment sold or installed will be designed for the particular gas sold by the seller or installer, will be installed in accordance with recognized practice, and will bear the approval of competent authorities. Service will be discontinued if supplier learns that sub-standard appliances are connected.

5. Competent employees will install equipment and appliances, and will perform complete inspection and adjustment services before leaving such job.

6. Storage tanks and cylinders will be installed and charged at recognized safe distances from buildings, as prescribed in National Board of Fire Underwriters Pamphlet 58 or Kentucky Standards of Safety. Storage tanks and cylinders will not be installed in basement, below deck on boats, or inside trailers, and will not be supplied with gas if so installed.

7. Containers will be filled only by the owner or on express authorization from the person determined to be the legal owner.

8. Employees will be trained in the safe handling, storing and servicing of butane and propane and appliances, accessories and equipment.

9. Applicable regulations of National Board of Fire Underwriters, American Gas Association, Underwriters' Laboratories, Inc., and Kentucky Standards of Safety will be strictly followed.

# Propane in Industry

## Why LP-Gas Does a Better Porcelain Enameling Job.

THE increasing popularity of liquid petroleum gas, particularly propane, in the porcelain enamel industry is indicated by the many porcelain enamel producers who have either converted their plants to full time use of propane heating or who have installed propane standby units to guard against natural gas shortages and shutdowns.

For many years the porcelain enamel industry has used electricity, oil and natural gas for heating ovens and dryers. However, because of the greater demands imposed on natural gas supplies during and after the war, liquid petroleum gas was recognized as a fuel which could relieve producers of breakdown worries and production losses and at the same time maintain the high standard of quality prevailing in the porcelain enamel industry.

Many manufacturers in this field are convinced of the necessity for propane standby units and this conviction has stemmed pri-



E. A. JAMISON

By E. A. JAMISON

Sales Department,  
Philgas Division, Phillips Petroleum Co.,  
Bartlesville, Okla.

marily from periodic loss of production due to failure of regular fuel supplies, and secondly, from realization of the particular merits of propane heating itself.

Porcelain enamel producers have found that, while the cost of liquid petroleum gas per therm is higher than that of natural gas, it produces porcelain enamel finish qualities equal to those resulting from natural gas firing.

In addition, the complete absence of inerts in liquid petroleum gas assures a higher available heat and a cleaner burning flame, practically free from sulphur and other contaminations. The cleanliness of propane firing appeals especially to porcelain enamelers because of the rigid specifications governing the manufacture of porcelain enamel.

A few porcelain enamelers have converted to full time use of LP-Gas. Many, however, have installed standby units to provide emergency heating and insure continuous production.

One such enameling enterprise, The Electric Appliance Division



LP-Gas storage facilities at Westinghouse Electric Corp., Mansfield, Ohio.

Plant of the Westinghouse Electric Corp., located at Mansfield, Ohio, installed a standby unit with a capacity of 50,000 cubic feet per hour. According to J. B. Simons, enamel division superintendent, the three main factors upon which Westinghouse justified installation of the propane unit as a supplementary fuel supplier were as follows:

- (1) No changes were necessary in burner equipment.
- (2) Gas could be fed into the system in varying proportion to available supply.
- (3) All facilities were uniformly serviced.

Another porcelain enamel manufacturer, the Florence Stove Co.,

Kankakee, Ill., found it impossible to operate its plant solely on the available supply of natural gas, according to C. Herwig, general superintendent. In fact, this plant depends entirely on propane heating from mid-October to the first of April each year and maintains the system as a standby unit during the remainder of the year. A storage capacity of 60,000 gallons of propane is on hand at all times at the Florence plant and the change-over to LP-Gas heating can be accomplished in less than a minute.

One of the factors which has influenced porcelain enamelters in converting from fuel oil, natural, and producer gas firing is the lack of impurities, such as sulphur, in

LP-Gas. Where full muffle type furnaces are ordinarily required to prevent discoloration of the product, low stub muffles can be used with propane. This action has resulted in faster heating, unvarying product quality, and more flexibility in firing techniques.

A large manufacturer of sanitary ware has used liquefied petroleum gases since 1932, first replacing manufactured gas in several small operations and, later on, discontinuing both producer gas and oil in favor of propane.

#### **Oil Costs More Than Gas**

Exhaustive tests showed that the maintenance cost of oil burner equipment was much higher than that of LP-Gas—due largely to periodic cleaning of oil burners, keeping pumps and regulators in good condition, and the necessity of frequent adjustment of burners by operators. LP-Gas, on the other hand, requires practically no maintenance and provides constant, easily controlled heat.

Two of the most important considerations in the installation of propane units are the availability of supply from the producer and convenience of transportation facilities.

As the liquefied petroleum gas industries increase production, making possible more economical utilization of their output, more and more porcelain enamelters will probably look to LP-Gas for full-time as well as standby fuel supplies.

#### **CALENDAR**

1950

Feb. 6-8—Rocky Mountain Empire Service School, Central Christian Church, Denver, Colo.

Feb. 20—New Jersey LP-Gas Assn. Hotel Berkley-Cartaret, Asbury Park.

Mar. 1st Week—LPGA Board of Directors Meeting, Mayo Hotel, Tulsa, Okla.

Mar. 20-24—South Eastern LP-Gas Service School, Southern Technical Institute, Chamblee, Ga.

Mar. 24-25—Alabama LP-Gas Dealers Assn. Birmingham.

Mar. 27—Gas Fuel Technology Course starts at Southern Technical Institute, Chamblee, Ga.

April 12-14—National Petroleum Assn. Hotel Cleveland, Cleveland, Ohio.

April 24-26—Natural Gasoline Assn. of America Annual Convention, Texas Hotel, Ft. Worth, Texas.

May 8-11—Liquefied Petroleum Gas Assn. Annual Convention & Trade Show, Palmer House, Chicago.

May 15-18—National Fire Protection Assn. Haddon Hall, Atlantic City, N. J.

May 18-19—Missouri LP-Gas Assn. Convention and Trade Show, Hotel President, Kansas City, Mo.

May 28-30—Gas Appliance Manufacturers Assn. Annual Meeting, The Greenbrier, White Sulphur Springs, W. Va.

June 22-24—Texas Butane Dealers Assn. Blackstone and Texas Hotels, Fort Worth.

July 24-26—Mid-Continent LP-Gas Service School, University of Kansas, Lawrence, Kans.

Aug. 21-22—Kentucky LP-Gas Assn. Annual Convention and Trade Show, Seelbach Hotel, Louisville.

Sept. 13-15—National Petroleum Assn. Hotel Traymore, Atlantic City, N. J.

Sept. 18-20—National Butane-Propane Assn. Congress Hotel, Chicago.

Oct. 2-6—American Gas Assn. Annual Convention, Atlantic City, N. J.

Oct. 2-6—Gas Appliance Manufacturers Assn. Exhibition of Gas Appliances and Equipment, Atlantic City, N. J.

Oct. 19-20—National Safety Congress, Chicago, Ill.

# Don't Worry Over Competition--Fight It!

Due to the consistent use of advertising and sales promotion by the electrical industry, the LP-Gas and appliance dealer may become discouraged to the point of assuming that he is unable to compete with the electrical industry. A brief analysis of the potential LP-Gas market and a comparison of the relative efficiencies of the two types of fuel, will dispel any such discouragement.

In compiling the 1940 census, the Department of Commerce classified the cooking fuel used in rural farm and rural non-farm dwellings, as in Table 1.

At the close of the year 1948, it was estimated that five and one-half million homes were using LP-Gas. Assuming this to be true, it would appear that more than 5,600,000 homes are still using coal, coke, wood, kerosene or gasoline for fuel and are therefore a potential market for LP-Gas installations.\* Using the sale of domestic storage tanks as the best yardstick by which to determine the number of new installations, sales were reported by state regulatory bodies which had the information available for the year 1948, as shown in Table 2.

\* Latest estimates of the unsold market show twice this potential in the domestic field.—Editor.

By JOHN W. KELLY

Secretary-Treasurer, Agi-Gas Corp.,  
Tulsa, Okla.

TABLE 2

State	Number of Tanks Sold
Arkansas .....	13,693
Louisiana .....	12,494
Mississippi .....	14,000
Oklahoma .....	6,031
Total .....	46,218

Projecting these figures to cover the 48 states, the annual rate of installations is indicated to be approximately 555,000. At this rate it would require approximately 10 years in which to supply the present potential domestic market. It may be argued that the development of rural electrification has reduced the potential LP-Gas market, but the fact that a home is wired for electricity does not rule it out as a potential LP-Gas customer, as will be discussed later.

Since available statistics indicate

TABLE 1.

Dwellings	Total	Coal or Coke	Wood	Kerosene or Gasoline
Farm .....	6,483,018	985,883	4,867,345	629,790
Non-Farm .....	4,675,691	1,348,298	2,013,147	1,314,246
Totals....	11,158,709	2,334,181	6,880,492	1,944,036

# GET 'EM WHILE THEY'RE HOT...

and you'll make a cool profit with the new Dearborn Weather-Maker evaporative coolers and the NEW, 1950 Sifon-Aire window fan...



YOUR MARKET IS READY... and here are the Dearborn Weather-Makers for 1950 that are ready for the market!

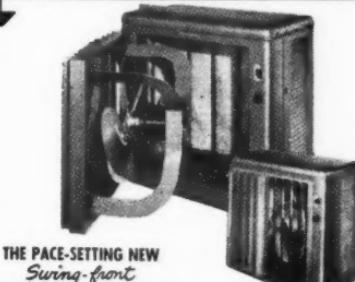
**R**EADY NOW... Dearborn's new, profit-making line of WEATHER-MAKER evaporative coolers... its brand new 1950 SIFON-AIRE Window Fan. Ready to bring you the biggest sales year in history! Get your orders in now for the hottest line of comfort-makers on the market... get ready for hot weather sales... get your customers while they're hot!

## GET THE FACTS ON YOUR OWN HOME TOWN MARKET WITH DEARBORN'S EXCLUSIVE MARKET ANALYSIS!

Your Dearborn salesman can give you powerful selling information—vital facts and figures on the market, right in your own "back yard." He can tell you the...

- Dollar sales potential—in *your* market.
- Total number of wired homes—in *your* market.
- Total spendable income—in *your* market.
- Amount and kind of advertising Dearborn will pour into *your* market.
- Necessary amount of local advertising for you to run over your own signature in *your* market. *and other market data never before available!*

It's an exclusive market analysis... careful fact-finding in *your* territory... prepared by Dearborn especially for you... it means money in the bank for you!



### THE PACE-SETTING NEW Swing-front DEARBORN-AIRE DEF-22B

America's most advanced evaporative cooler with its Swing-front design—another exclusive Dearborn feature. In moments, motor and pads are accessible for routine care that means longer life and top level efficiency. Dozens of other features make it America's most outstanding Cooler value.

### THE REVOLUTIONARY, 1950 SIFON-AIRE WINDOW FAN DWF-25B

New design, new finish, new efficiency—the 1950 Sifon-Aire is a distinct departure from orthodox fan design. Brand new ORCHID blade most efficient ever designed for exhaust fan. Unique design eliminates air turbulence at fan's center and vortexing at blade tips. Gives smooth, even flow of air in greater volume. N.E.M.A. rated 2,500 CFM at 1,050 RPM.



### BIG WEATHER-MAKERS FOR BIG COOLING JOBS DEARBORN-AIRE DEF-25 AND DEF-35

Feature for feature, the best looking, most efficient, trouble-free coolers on the market. New Dearborn-Aire DEF-25 and DEF-35 window enclosure assembly makes installation in most casement windows as simple as any other kind. New features, new efficiency, new economy mean new profits for you.



Get your order in early for  
your Dearborn Weather-Makers  
THEY'RE PROFIT-MAKERS

## Dearborn

DEARBORN STOVE COMPANY  
Factories: DALLAS • CHICAGO  
General Offices: 1700 WEST COMMERCE ST., DALLAS, TEXAS

a substantial future market for the domestic use of LP-Gas, the question arises as to the availability of the gas and appliances to serve that market. One of the most comprehensive surveys of the reserves and availability of LP-Gas is contained in a report prepared by T. W. Legatski, assistant director of research, Phillips Petroleum Co., entitled "Propane's Place in the Sun." (See *BUTANE-PROPANE News*, Dec. 1948, P. 58.) A summary of the findings in this survey regarding the future available potential of butane and propane gas is reviewed as follows:

"One of the most reassuring observations is that the potential supply of liquefied gas hydrocarbons is seemingly endless. It is estimated that 325,000,000 barrels of butane and propane are currently available in production and plant streams on an annual basis. Only about one-sixth of this is currently being used as liquefied gas for fuel and chemical purposes."

### Production Exceeds Demand

The above statement is supported by a chart comparing the estimated annual potential production with the total annual consumption of LP-Gas. This chart indicates that for the year 1937, the excess of potential production over total consumption was approximately 9 billion gallons, whereas 10 years later, in 1947, the excess rose to 12 billion gallons. It would appear from this survey that the future supply of LP-Gas will always be more than adequate to fill the demand.

The supply of appliances, ranges, space heaters, water heaters, storage tanks, etc., is directly related to the supply of steel, since there is apparently sufficient capacity for the producing of equipment to satisfy

the demand. Inasmuch as the production of steel has dropped from a high of around 104% to around 84% at the present time, it appears that the shortage of steel available for equipment manufacture is ended.

Since the future potential domestic user's market is substantial, the supply of the gas endless, and an adequate supply of appliances practically assured, it would appear that the energies of the dealer must be directed toward meeting competition. One of the first things to be done is to inform himself as to the merits of LP-Gas as a fuel, in comparison with electricity.

### Heat Value Is Best Guide

Much has been written and discussed about the use of LP-Gas and electricity as fuel on a competitive cost basis. Comparisons depend to a large extent upon the location in which the tests for the comparison are conducted. Because of variations in local rates for the different fuels, it is difficult to make any general comparisons on a cost basis. Since the competition between the two types of fuel is actually on the price of heat produced per unit, the most equitable basis for comparison should be measured in Btu's. The Btu ratings per unit of the fuels are approximately as follows:

1 KWH of electricity provides	3,412 Btu's
1 gallon of propane provides	64,050 Btu's
1 gallon of butane provides	71,820 Btu's

Further development of these figures discloses that, rated at 70% efficient, one gallon of propane is equivalent to approximately 19 KWH of electricity and on the same basis, one gallon of butane is equivalent to approximately 21 KWH. The most effective methods of utilizing the above comparison is for the dealer

to apply it to his prospective customer's specific desires or needs.

To illustrate, if the prospect is interested in the purchase of a range, the dealer should know that whether gas or electricity is used, about 480,000 Btu's are required to cook for one month, in the average home. The fuel required would thus be 140 KWH of electricity or 7½ gallons of propane.

By application of the local rate for the respective type of fuel, the dealer will be able to show his prospect the facts about the cost of electrical and LP-Gas energy.

Apparently the only real advantage enjoyed by electricity as compared to LP-Gas, at the present time, is in advertising and merchandising. In order to counteract this advantage, the dealer must inform himself of the advantages of LP-Gas and transmit this information to his prospective customers.

## National LP-Gas Promotion Receiving Widespread Interest

According to word from the Liquefied Petroleum Gas Assn., numerous companies have already pledged their financial support of the campaign for promotion of the liquefied petroleum gas industry.

Robert E. Borden, secretary of the National Committee for LP-Gas Promotion, states that the first step in the program — an extensive market survey — has been launched by The Buchen Co., Chicago advertising agency appointed to handle the advertising phase of the program. Report on the survey will probably be made at the next meeting of the committee scheduled for the last of January or first part of February.

M. L. Trotter, president of the Carolina Butane Gas Co., Columbia, S. C., vice chairman of the commit-



M. L. TROTTER



BOB BORDEN

tee, is currently acting as chairman until the appointment at the meeting of a permanent chairman to succeed the late John Pankow.

A number of subcommittee appointments have been announced in connection with the project. They are as follows:

**Copy:** Carl Sorby, Geo. D. Roper Corp., chairman; Louis Abramson, Jr., Petrolane Gas Co.; J. Richard Verkamp, The Verkamp Corp.; Jerry French, The Bastian-Blessing Co.; and Fred Rice, Phillips Petroleum Co.

**Finance:** Arthur C. Kreutzer, LPGA; William F. Lowe, Natural Gasoline Assn. of America; and H. Leigh Whitelaw, Gas Appliance Manufacturers Assn.

**Speakers:** K. R. D. Wolfe, Fisher Governor Co., chairman.

**Training:** Lee A. Brand, Empire Stove Co., chairman.

Fund-raising subcommittees have been broken down as follows. (Chairmen are indicated):

**Cylinders:** Herman Merker, Pressed Steel Tank Co.

**Equipment:** E. L. Mills, The Bastian-Blessing Co.

**Heaters:** Lyle Harvey, Affiliated Gas Equipment Co.

**Marketers:** M. L. Trotter.

**Miscellaneous appliances and gas-consuming equipment:** Charles W.

Johnson, Johnson Gas Appliance Co.  
Producers: H. E. Felt, Warren Petroleum Corp.

Ranges: Julius Klein, Caloric Stove Co.

Refrigerators: J. K. Knighton, Servel, Inc.

Tanks: H. S. Phillips, Delta Tank Manufacturing Co.

Water Heaters: A. B. Cameron, Ruud Manufacturing Co.

Embracing advertising, publicity, employee training, and special public relations, the program will be financed by voluntary contributions, some of which have started coming in, from all branches of the industry—marketers, producers, appliance and equipment manufacturers.

The movement, co-sponsored by the LPGA, GAMA, and NGAA, expects to raise between \$500,000 and \$1,000,000 for the first year of the activity. Funds for the program will be paid to a firm of public accountants to be designated as financial agent in order to keep sales figures in strictest confidence. Participants will use identifying seals or stickers on tanks, cylinders, appliances, and invoices.

## News of Maine Dealers Shows Company Changes

Several changes in dealer organizations in Maine have occurred recently. These include:

The appointment of Howard Co. as Pyrofax dealer in Hallowell and surrounding territory.

The incorporation of DeBlois and Lauzirere in Lewiston, succeeding Louis Bail as "Utility Gas" dealer there.

The sale of the Boothbay Harbor Fuelite dealership by N. A. Greenleaf to W. W. Willson.

## Technology Institute Offers Gas Abstracts to Industry

With the January, 1950, issue, Gas Abstracts enters its sixth year of providing comprehensive digests of the current literature bearing on the problems of the gas industry. Prepared by the Institute of Gas Technology, Technology Center, Chicago, Gas Abstracts is the only publication so serving the gas industry today.

More than 80 journals are surveyed each month for pertinent information and selected articles are abstracted by specially qualified Institute staff members. Author and subject indexes are prepared annually, so that Gas Abstracts becomes an indexed yearly record of gas industry developments reported in the literature or patents.

## Gama Announces New Series Of Washington Reports

A new service designed to keep members of the Gas Appliance Manufacturers Assn. better informed on what is happening in the Nation's capitol, is announced by H. Leigh Whitelaw, managing director of GAMA.

This new GAMA service is designed to provide association members accurate, up-to-the-minute information on what goes on in Washington as it would affect their businesses.

The first of this series of Washington reports, prepared by James R. Lee, GAMA's newly appointed Washington representative, deals with "Housing Facts and Prospects." It is felt that the development of various housing programs with government assistance is of prime importance to manufacturers.

gas  
of  
the  
re-  
go,  
ion  
ay.  
ur-  
in-  
are  
In-  
and  
an-  
be-  
of  
rted

es

keep  
ance  
med  
on's  
neigh-  
of

de-  
mem-  
in-  
ash-  
busi-  
  
ash-  
ames  
nted  
deals  
cts."  
t of  
with  
rime

News



## **PICTURE YOUR PROFITS**

**with McNamar's 115-Gallon Sphere**

McNamara's popular 115-gallon Sphere has been a favorite in the butane-propane industry because dealers know that it is a fast seller and gives you a quick profit. Built to McNamar's exacting specifications, it is a dependable tank that is easy to handle and one that will give you year-in and year-out service. Complete with fittings, ready for installation—115-gal. capacity.



**McNamara Boiler & Tank Co.**

PLANT NO. 1 — BOX 868, TULSA, OKLA. • PLANT NO. 2 — BOX 206, E. ST. LOUIS, ILL.

# FIRST OVERHAUL

By CARL ABELL

**A** QUARTER of a million miles —equal to 10 times around the world—is a lot of distance. Many truck operators think that if they get that many miles on an engine before it is worn out, they have done all right.

Of course the best stories come from Texas. The boys down at the Lone Star Butane Co., which serves the lower Rio Grande valley, look on high mileages and little repairs as routine, ordinary stuff. They see it all the time. But now they are really bragging. One of their big butane fueled semi-trailer transport units pulled by a White WB 22 went 250,000 miles before it was necessary to remove the cylinder head for the first repairs. That's really something, even in Texas or on LP-Gas!

The superintendent of the local White agency was on hand when the engine was opened, presumably to advise and consult. As it turned out, he was mostly there to look. The block and pistons showed only about the amount of wear that is normally expected in 30,000 miles of operation on gasoline. There was no need for reboring. The pistons

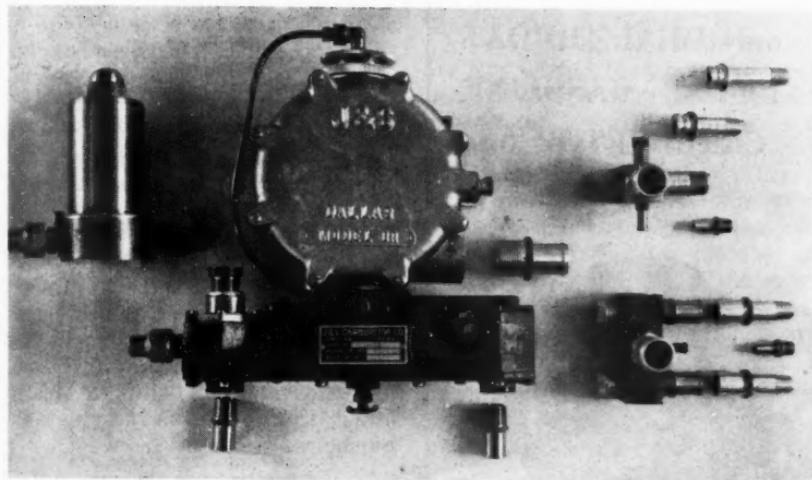
were cleaned and fitted with new rings—the old ones were tired from going up and down so many times. The rest of the overhaul consisted of a valve grind (the first, and all valves were still good), new inserts and bearings, and minor mechanical adjustments.

Since the first overhaul at 250,000 miles, the engine has continued in service with no more than the expected maintenance operations. It was originally placed in service in October, 1946, after first being equipped with J & S butane carburetion. While the gasoline carburetion system remained intact and could have been used at any time, it has never been necessary to run on gasoline. The engine passed the 300,000 mile mark about Dec. 10, 1949.

For the first 100,000 miles, an overhead lubricator was kept in operation. During the past two years the overhead injector has

**POWER**

# TRAVEL 250,000 MILES



The J & S carburetion system adapts either single or double throated gasoline carburetors to burn LP-Gas. It includes a balanced regulator with water controlled heat exchanger for converting liquid fuel to dry vapor.

been used only occasionally, to give the upper part of the engine a thorough periodical lubrication with white oil. Crankcase oil has been changed at about 5000-mile intervals. It always appears in good condition when it is taken out, and at the time of the overhaul the crankcase was almost completely clean.

This particular truck has had an exceptional amount of use. During the past several months it has been in service practically 24 hours

a day, operating with three shifts of drivers. It seldom gets a chance to cool off for more than an hour or two at a time. This, of course, eliminates any troubles and wear which might have developed from a multitude of cold starts, but it does not eliminate the work of pulling a gross load of 42,500 pounds. Its fuel consumption has averaged 4.8 miles per gallon.

The Lone Star Butane Co. serves the lower Rio Grande Valley, operating bulk plants at Mission, Mc-

# CENTURY

... has the  
only DUAL THROAT  
LP-GAS-GASOLINE  
CARBURETOR on  
the Market



- No adaptor necessary.
- Two separate throats . . gives better distribution of fuel.
- Simple to adjust.

## Century Gas Equipment Co.

*"Oldest Manufacturer of  
Butane Carburetion"*

Lynwood, Calif.

NEvada 6-1650

Allen, Weslaco, Edinburg, Harlingen, Port Isabel, Brownsville, and Raymondville. All of their delivery trucks are equipped with J & S carburetors and operate on butane-propane. Their experience in operating vehicles on this fuel goes back to 1940. In addition to a saving in fuel cost, their records show maintenance economy due to the long periods between engine repair jobs. This leads to a second economy, since it is not necessary to own so many spare vehicles to insure always having enough available to take care of the necessary deliveries.

Results in their own fleet have been so satisfactory that they have taken the agency for the J & S carburetors, and have recently completed conversion of 40 trucks for one of the valley trucking concerns. They have also equipped many other trucks, and a considerable number of tractors.

### Builds the Gas Load

The officials of Lone Star Butane point out that the gallonage through their plants has shown a substantial increase as the result of their carburetion sales. One big truck on line haul service will consume as much fuel in a year as 20 to 30 domestic installations. One tractor will consume as much as from 3 to 5 average home installations in their Southern location, where the heating load is less than in most other parts of the country. Lone Star likes to supply this power fuel because unit deliveries are larger, and hence delivery costs are less.

They look upon truck fleet con-

version as particularly desirable because deliveries are large, the truck bases are almost always accessible over paved roads, and most of the available fleets headquarter in the town where the company's bulk plants are located, so delivery distance is low. It is volume business which can be handled at minimum cost.

## Varied Load Helps Balance For California Distributor

In the San Joaquin valley of central California the use of LP-Gas in many agricultural applications has enabled dealers to greatly augment their fuel sales, and frequently to spread usage over a wider range of seasons than is common elsewhere.

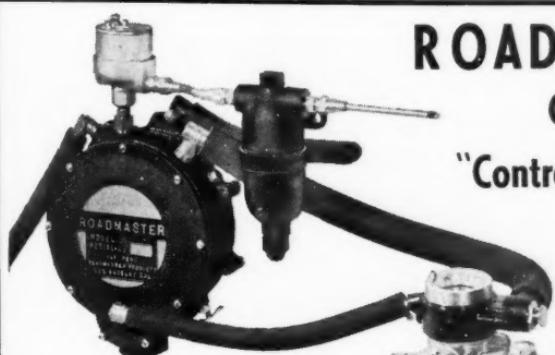
The Bakern Liquid Gas Co., of

Bakersfield, is an example. Supplementing the all-year domestic load, LP-Gas is used for industrial plants, cotton gins, flame weeding and row crop cultivation, water and oil drilling, tractor fuel, and irrigation pumping.

A special and recent use is the application of liquid fertilizer through back pumping.

Expensive liquid fertilizers, as a component of irrigation waters, are now flushed back over the fields by back pumps, doubling and sometimes tripling fertilizer utilization. Besides, irrigation waters — at premium prices in the valley — aren't wasted anymore. Not with LP-Gas and back pumps on the job. LP-Gas is especially adaptable to back pumps because of the need for portability and seasonal use.

Since most of these pumps are



\* The NEW Roadmaster LP-Gas Carburetion equipment supplies vapor fuel to engine at "controlled pressure above atmospheric." When this is done, starting, idle, cruising and load operating conditions are easily met by employing a simple metering control such as venturi and fuel orifice. Proper air fuel ratios are obtained over entire operating range. Performance is greatly improved.

For complete information, write:

## ROADMASTER Gives You "Controlled Pressure"\*

### FEATURES:

- New electric fuel valve gives positive shut-off.
- New Vaporizer-Regulator discharges at controlled pressure .. not sub-atmospheric.
- Simple Carburetor Adapter is venturi type ... employs one fuel load adjustment; fits standard air horn.

ROADMASTER PRODUCTS CO.  
3350 San Fernando Road  
Los Angeles, Calif.

# "BE ALGAS WISE MAKE PROFITS RISE!"

L-P GAS DEALERS—1950 IS  
"CONVERSION YEAR" —  
CONVERT YOUR SLACK  
MONTHS INTO PROFITS!

L-P Gas Dealers are now getting ready for Spring Conversions. Besides finding new and profitable Conversion markets right in their own territory with new, easy-to-sell, easy-to-install ALGAS Units, they're insuring bigger fuel sales thru summer months.

- *Profits from new installations*
- *New L-P Gas sales year 'round*
- *New customers every month!*

Without obligation, you can obtain complete information on ALGAS L-P Conversions for truck, bus, tractor and stationary engines.

*Write for full information now  
while territories are still open.*



**AMERICAN LIQUID  
GAS CORP.**  
DEPT. K- 1109 S. SANTA FE  
LOS ANGELES 21  
CALIFORNIA

portable, Bakern is finding it an almost non-competitive field. One local rancher uses six back pumps—all portable—four months a year. All LP-Gas fueled, of course.

Another load getter—especially during slack summer months, is the San Joaquin's use of portable well developers and testers during surging operations which draw a tremendous load for short duration, sometime consuming 500 gallons of propane during 24-hours of continual operations. Propane, used in conjunction with combustion engines, like the Climax, 400 hp. engine, gives greater flexibility because combustion engines—not electrically driven ones—can regulate output during maximum surging operations in well testing. Once surged and brought to peak output, a well owner may naturally turn to Bakern for its permanent pumping requirements.

Meanwhile, Bakern plans for increased operations as the San Joaquin valley grows in agricultural and industrial importance.

## C. C. Turner Named President Of Maine Gas & Appliances

At the annual meeting of Maine Gas & Appliances, Inc., of Portland, Maine, the firm named C. C. Turner as president.

Formerly vice president and general manager, Mr. Turner succeeds Orman F. Cummings, of Waterville. Mr. Cummings retains his interest in the firm and will serve as vice president and treasurer.

Other officers are Arnold Blackstone, assistant treasurer, and Arthur Welch, clerk.

## Combustion Principles Taught at Service School

THE Yuba-Sutter Oil and Burner Co., LP-Gas and equipment distributors of Marysville, Calif., has recently concluded a class for 12 members of its sales, installation, and service departments. The study material included the principles of combustion, and the design and operation of LP-Gas burners. It was the belief of L. M. Rose, owner and manager of this company, that a thorough understanding of these matters would lead to a more satisfactory service for the customers all the way down the line.



CARL GOLDEN

### Special Problems Involved

Marysville is located in the Sacramento Valley, in an area where farming is extremely diversified. LP-Gas heat is used as an adjunct in processing many agricultural commodities, including milk, rice, alfalfa meal, hops, walnuts, etc. Special problems including design of heating apparatus are constantly arising. These make it necessary to "tailor the heating plant" to that particular job. Mr. Rose felt that it would be particularly advantageous to handle all these details of design through his own staff.

With the large number of burners of several makes for which his company is supplying fuel, it was also important that his service staff should be thoroughly grounded in the principles of combustion. They would then be in much better position to find the

## 1949 Was A BANNER YEAR for DIX

Many new dealers gained new customers and greater profits in 1949 through the sale of DIX LP-Gas Carburetion. It's easy with DIX because a DIX unit is so simple.

Investigate NOW . . . the  
DIX PLAN for 1950

### Dix Manufacturing Co.

Export: 301 Clay St., San Francisco  
3447 E. Pico Blvd., Los Angeles 23, Calif.

### FOR BETTER CONVERSIONS

(TO L-P  
GAS)



Make every conversion a better installation by using an Ellis Manifold designed especially for LP-Gas. Your customers will find they get more power and mileage . . . and you will get more customers.

Ellis "Bu-Power" Manifolds have been tested and proven by hundreds of successful installations.

**ELLIS MANIFOLD CO.**  
1708 S. Soto St. Los Angeles 23, Calif.

answers to problems arising in the operation of the burners on which no service information was available.

The services of Carl E. Golden, engineer of the butane division of Ransome Co., Emeryville, Calif., were secured as instructor. Mr. Golden has had wide experience in this type of instruction, having previously conducted a series of similar educational meetings for about 30 Ransome company employees and other local butane servicemen, and participated in last year's LP-Gas instruction course at the University of California which was sponsored by the LPGA.

In order to have adequate text material, and leave each student with a practical working manual after finishing the course, Mr. Golden prepared and presented to each student a 100-page manual covering the safe handling and application of liquefied petroleum gases to burner problems.

#### Manual Does Good Job

This manual is unique in several respects. For example, the chapter on combustion covers this subject in such a simple and clear manner that individuals not possessed of any previous knowledge of chemistry are able to obtain a good conception of the fundamental principles.

At the same time, the subject is adequately covered to meet the needs of the advanced student of chemistry and combustion. It also includes the necessary chemical and physical information, pertinent tables and charts, and formulas which are useful in the design and operation of burners for the widest possible range of purposes.

In order to assist the user in the practical application of the subjects discussed, the manual contains the step-by-step solution to many problems that continually confront those concerned with the sale and application of LP-Gas.

Mr. Rose believes that his organization is in a much better position to meet the needs of its clientele as the result of having presented this class.

#### Standby at Eureka, Calif. Solves Increased Demand

BY ERNEST W. SNOWBERGER

The first part of a propane gas standby installation which may eventually run to \$1,175,000 in cost was placed in operation at Eureka, Calif., on Jan. 2 by the Pacific Gas & Electric Co. to take care of the increased demand during the winter, according to Superintendent of Production Chris Knudsen.

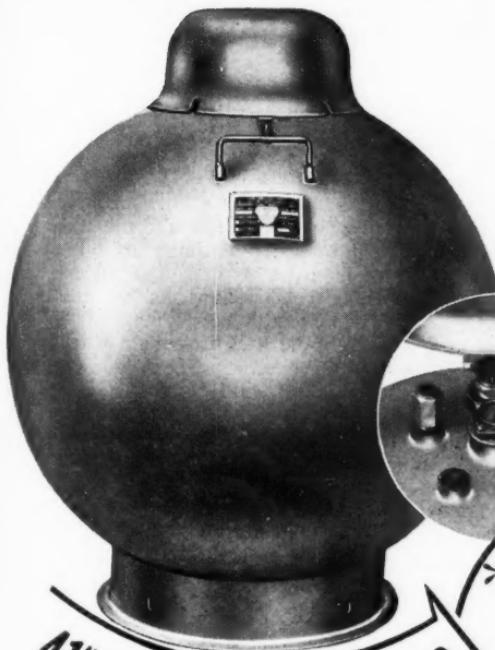
The company started installation of five 30,000-gallon capacity propane tanks, one boiler, and two compressors at the foot of Whipple St. in Eureka on Sept. 15 last year.

Expected to be completed by about the end of January, this first half of a planned project for Eureka will be able to produce 110,000 cubic feet of gas per hour.

Vaporizers have been installed on the boiler and compressors to take care of the new operation. A spur track has also been built. Nine car-loads of the fuel per day will be required during 24-hour operation of the plant.

This year, if business continues to expand in this area, the Pacific Gas and Electric Co. will install the other half of the plant, which will also consist of five tanks, one boiler, and two more compressors, said Mr. Knudsen.

The first half of the plant is costing \$375,000. Possibly another \$800,000 will be required for the balance of the plant and for an installation which is planned for the nearby town of Arcata.



**41" PROPANE SPHERES  
COMPLETE WITH FITTINGS**

**\$74<sup>00</sup>  
EACH**

*In lots of 15 or more.  
\$76.00 in smaller quantities.  
F. O. B. Plant, Los Angeles*

As long as present steel stocks last we will continue to accept orders for these popular-sized units at this low competitive price.

In addition to low purchase price, these SUPERIOR SPHERES require only one man for delivery and installation. They build lasting good-will with your customers by giving long years of carefree service wherever installed.

*\*Price Subject to Change Without Notice*

**SPECIFICATIONS:**

Capacity—150 Water Gallons  
Weight—410 lbs.  
O.D.—41"  
Height—4'-0 1/4"  
Base—2'-1" Dia.  
Shell—1/4" A-285 FLG  
Qual. Steel

**SUPERIOR TANK &  
6155 So. Eastern Ave.**



**CONSTRUCTION CO.**  
Los Angeles 22, Calif.

## Display Appliances to Make Sales

PERKINS Appliance Co., of Escondido, Calif., is standing proof that the biggest part of appliance selling is display . . . exposing the LP-Gas customers to the view of new appliances. That, and advertising.

For Perkins Appliance Co. sells appliances despite disadvantages of location and size of display room.

Here are the facts about this concern:

When Tom Perkins came out of service several years ago, he opened the appliance store. His entire pre-service experience had been with his father in the Escondido Butane Gas Co. During the war, however, Mr. Perkins' father, who'd operated the company since 1936, sold the business to his brother-in-law, Carl R. Hammond.

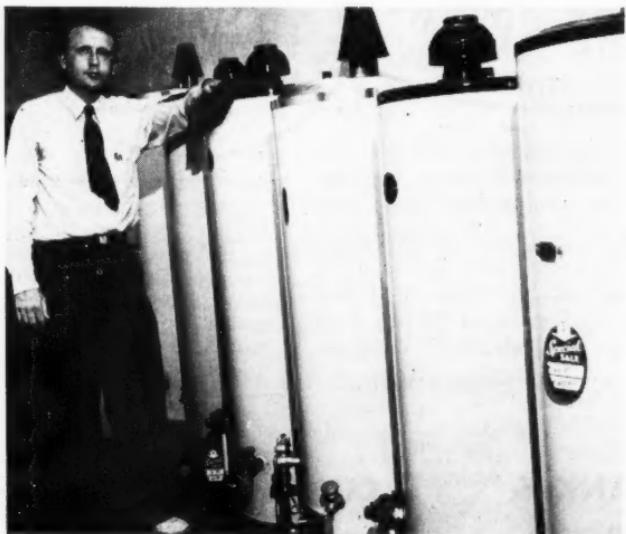
By JOE BAER

Since Escondido Butane Gas Co. still operates without an office, not to mention a gas appliance room, young Tom Perkins made a deal with his uncle.

He, Tom Perkins, would start a gas appliance store in Escondido. Mr. Hammond could refer his customers to this office for service or merchandise calls. Mr. Perkins would take telephone calls for the other firm, collect bills, and act as contact man for the office-less company.

The only store available at the time was a little back-street, 12-foot place, away from the main shopping center.

Tom Perkins rented this store,



Tom Perkins, Escondido, Calif., is dusting off some of his appliances. He always keeps them shining.

stocked it with gas water heaters, ranges, floor furnaces, and smaller trailer stoves. He made the most of the 12-footer, displaying as much stock as possible. He showed customers a good selection of gas appliances, including nine LP-Gas water heaters, five ranges, floor furnaces and space heaters.

And the store pays Tom Perkins a good livelihood. His trade comes from two sources—customers coming to pay bills, and customers attracted by advertisements. Mr. Perkins overcomes disadvantages of location with advertisements in Escondido's daily newspaper and in the weekly, too, since this has a good "back country" circulation. He keeps his name before gas appliance users in continuous 1-column, 2-inch advertisements.

He supplements the smaller ads with larger ones during special sales, or when he features some special item. His advertising budget is only \$25 to \$40 per month, but it produces good results.

Perkins Appliance Co. is ample proof that LP-Gas appliances can be sold even from a small display room and in a back-street location.

## LPGA Buys Film On Water Heating



**K. R. D. WOLFE**

education committee of the association, reports that arrangements to

A 35-millimeter sound-slide training film on gas water heaters, produced by GAMA, has been bought by the LPGA, and is available for member companies. K. R. D. Wolfe, Fisher Governor Co., and chairman of the



**ART KREUTZER**



**FRED RIVES**

borrow the film for a limited number of days may be made by contacting John Knox Smith, field engineer, LPGA, 11 S. La Salle St., Chicago 3.

The film is entitled "More for the Money" and is narrated by Marvin Mueller, radio announcer.

Two districts have replaced the one formerly in Canada as a result of action by the board of directors in December. A new director was also appointed for Mexico.

C. A. Asplund, Sturdi Propane, Lethbridge, Alberta, was elected director from the Western district and W. Walsh, Liquefied Gas Utilities, Ltd., Lachine, Quebec, director from the Eastern district.

Guillermo Santillana, Comisionistas de Chihuahua, Chihuahua, was named to fill the Mexican vacancy of the board.

Arthur C. Kreutzer, managing director of the association, has been appointed to the board of counsellors for the Fire Technology Division, Southwest Research Institute of Houston and San Antonio.

Utilizing the institute staff and laboratories and testing facilities of Essar ranch near San Antonio, the new division will concentrate on sci-

entific studies designed to reduce the loss of lives and property due to fire.

The second class at the Southern Technical Institute, Chamblee, Ga., will get under way Mar. 27 and applications are now being accepted.

An illustrated folder giving details of the course was recently sent out to association members and Fred A. Rives, chairman of the advisory committee in charge of the school, urges that this material be read carefully so that the instructions offered at the school will be understood.

According to Mr. Rives, many marketers are giving consideration to the idea of enrolling promising young men from their organizations.

The 18-month course has a fee of \$2250 for non-residents and \$1800 for residents of the state of Georgia. It is approved under the G.I. Bill of Rights.

## 1950 Convention Committee Appointed by LPGA

Program emphasis will be on sales and service at the 1950 annual convention and trade show of the Liquefied Petroleum Assn. scheduled for May 8-11 at the Palmer House in Chicago.

The convention committee, headed by W. A. Schuette, of Hausgas, Inc., Washington, Mo., is composed of the following men:

Sam I. Barber, Southern Gas Corp., Atlanta; Gilbert Bragg, United Liquid Gas Co., Fresno, Calif.; T. E. Ennett, Rockford Propane Co., Rockford Ill.; B. T. Harris, Butane Wholesale Gas Co., Little Rock; Helmer J. Harris, Badger Gas Products, Platteville, Wis.; Frank Henke, Harper-Wyman Co., Chicago; Dale J. Hermes, Stampings, Inc., Davenport, Iowa; Claude R. Hojel, Claude R. Hojel & Co., Mex-

ico City; H. W. Milner, Stewart-Warner Corp., Indianapolis; D. E. Palmer, Sturdie Propane, Lethbridge, Canada; E. L. Scott, Butane-Propane Service, Holyoke, Colo.; T. V. Scott, Weatherhead Co., Cleveland; and Fred Strobl, Pure Oil Co., Chicago.

## Florida Company's New Truck Has High Advertising Value

A new LP-Gas truck that can haul 2000 gals. of fuel has recently been put in use by the Protane Gas Service Co., St. Petersburg, Fla. The truck has two 990-gal. (water capacity) propane spheres, and can carry 16 additional 100-lb. cylinders. It is proving to be an excellent advertising feature, because it attracts so much attention on the highway. Lettering is in color and a beautiful blue flame is painted on the rear.

The truck was designed and outfitted on a Mack frame by Protane Service's parent company, Protane Corp., of Erie, Pa. Its cost was \$7000. Although the two propane spheres had to be raised several inches to make room for the smaller cylinders, S. M. Lewis, company manager, reports that the truck is not top-heavy in operation.

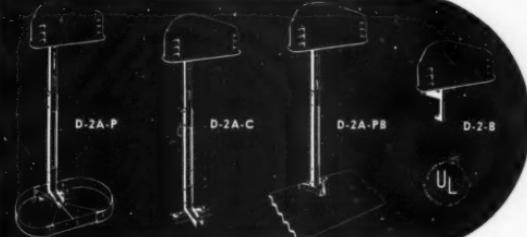
The new, high-capacity truck will serve Protane Service dealers along the west coast of Florida and larger commercial accounts. Largest percentage of the company's sales is in cylinders—some 250 commercial accounts and more than 5000 domestic customers buy gas from the company.

Protane Service's main bulk plant is in St. Petersburg, and its dealers in Tampa, Largo, Bradenton, Sarasota, and St. Petersburg Beach all have two 1000-gal. tanks for bottle refilling.

# Select the model that you need from these STAMPINGS HOUSINGS . . . THE COMPLETE LINE

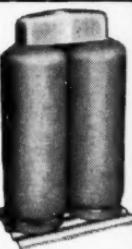
## THE D SERIES

This is Stampings finest housing. A one piece cover, no welds, no seams, no joints. Die pressed from heavy aluminum, it will not break. Maximum coverage on ALL regulator outfitts. Hinge is entirely protected from weather. Brass pin assures easy free action. Cover is self-supporting when up. See models at right.



## THE C SERIES

Designed especially for use with small and medium size regulators. Has Stampings quality and features at a good low price. Special tools and high production tools make this low price possible. Cover is one piece heavy aluminum, no welds, no seams, no joints will not break. Drawings at right show models available.

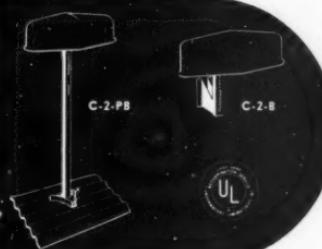


Complete unit with hood, post and base form. The post connects to the foot which is anchored in the concrete.

Complete unit consists of hood, post and foot. Reusable metal form [DIF] recommended for pouring base.

Complete unit with hood, post and pre-fabricated base. Ready to install immediately. Easy to set up.

Complete hood and bracket unit for attaching directly to wall of building. Holes adapted to all siding widths.



## THE SH-1

To be used with a standard single cylinder of any size. Easy to install and inexpensive to provide. Will accommodate all standard regulators used on single cylinder installations.



Heavy gauge steel with baked enamel, grey finish. Powderized to resist rust. Brass pin hinge.



STAMPINGS INC., DAVENPORT, IOWA

... . . . THE HOUSE OF BETTER HOUSINGS !

# Storing Propane-Air Gas Underground

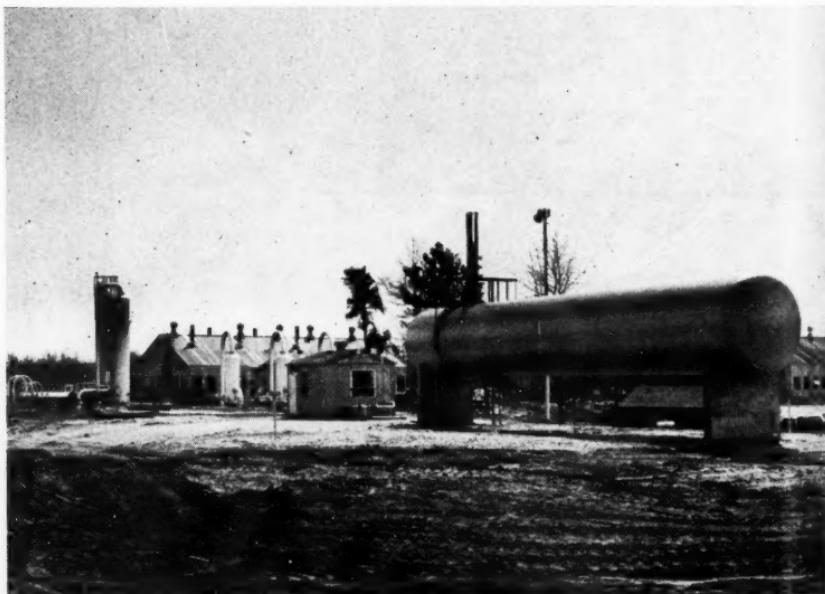
## Proves Solution for Peak Load Demands by Michigan Utility

ONE of the most elusive problems facing the LP-Gas industry—how to store gas underground economically to meet winter's peak demands—has been solved by at least one company in the last two years.

Michigan Gas Storage Co., a subsidiary company of Consumers Power Co. and Panhandle Eastern Pipe Line Co., successfully stored 1,271,000,000 cu. ft. of propane air in sand reser-

voirs  $\frac{1}{4}$ -mile below the earth's surface. The gas was stored in a propane-air-natural gas mixture, new equipment for the operation of which cost \$252,000, excluding equipment already on hand and available for conversion. Labor, materials, and supplies cost \$267,000, and 14,354,820 gals. of propane cost \$1,576,100.

Michigan Gas Storage had this problem: Its only customer, Consum-



Mixing station, showing tank and pump house in foreground and compressor building in background, with mixing tower to the left.

ers Power, with winter peak demands as high as 100 MM cfd per day, would run about one billion cu. ft. over the maximum amount of gas that could be stored with the facilities available during the 1948 input cycle (April to November). In order to meet this anticipated deficit, engineers of the parent and subsidiary companies studied various methods of obtaining additional gas. Natural gas was in short supply in the state, and no new discoveries had been made for several years.

### Built Plant at Storage Field

Panhandle's capacity for increasing deliveries to the area proved impossible because of the acute steel and material shortage then in existence. Operating difficulties and the shortage of oil ruled out a proposal for the making of high-Btu oil-gas in several existing standby emergency plants; likewise the cost (several million dollars) together with the above mentioned material shortages, eliminated the possibility of installing peak-shaving, propane-air units at principal distribution points. Finally, there emerged a plan to build one propane-air plant at the storage fields, having a capacity of 10 million cfd, add large amounts of natural gas, and store the mixture during the input cycle for use in periods of great demand.

The plant cost was figured to be about \$250,000, and would offer a uniform mixture available for immediate use. There was no record of mixing propane-air and natural gas on such a large scale for storage; there were immediate problems involving recovery, vaporization, condensation, interchangeability, and hydrate trouble. Each factor was investigated thoroughly, however, and the plan was found to be workable.

Approval for the construction was

given June 3, 1948—it was finished by July 15. Construction included a 1600-ft. railroad spur, six unloading racks, two steel buildings, and a four-mile, four-in. pipe line, together with a 4800-volt, three-phase power line and a private telephone line. Installations included three vapor compressors, two liquid transfer pumps, and one 30,000-gal. storage tank at the unloading station.

At the mixing station, which was incorporated with the natural gas compressor station, there were installed a 30,000-gal. storage tank, two high-pressure liquid transfer pumps, a steam exchanger vaporizer, and one 800-hp Ingersoll Rand two-stage air compressor. One 800-hp Ingersoll Rand single-stage compressor located in the main compressor building was converted to a third-stage air compressor. One of the dehydration contact towers was changed to a propane-air mixing tower. Water connections, air lines, after coolers, intercoolers, and a carbon and fire arrester were installed.

### A Six-Tank-Car Dump

After the plant was completed and had settled down into operation routine, six tank cars were unloaded at a time and the liquid propane was pumped through the pipe line to the mixing station, with the tanks at either end serving as surge tanks and reservoirs, to allow flexibility in the unloading operation and pumping rate. At the mixing station, the propane was pumped to a steam heat exchanger for vaporization—then it went to the mixing tower.

When the operation was started, neither the natural gas nor air was aftercooled before mixing with the propane. It was found, however, that inlet temperature of air and natural gas of 90°F regulated by the amount of aftercooling was required to give

the 70°F temperature desired for injection into the wells.

One by one, the problems encountered (i.e., necessity for coolers, interchangeability, condensation, etc.) were conquered. The result was the system worked to the satisfaction of everyone; customers last winter were not curtailed in their gas use beyond those restrictions already in use. An expected boost in service calls necessary proved unfounded; service calls were simple matters involving adjustments for higher gravity in space heaters, for instance, and there were few instances of call-backs.

## Green's Fuel Wins Ribbon At Ruskin, Fla., Tomato Fair

The red, second-prize ribbon for most attractive display at the Ruskin (Florida) Tomato Festival was won recently by Green's Fuel of Florida, Inc.

The Ruskin Festival, an annual winter affair in the community, is

fast gaining prominence in the state. Ruskin is a rural town that boasts the largest tomato-producing industry in the state—and Green's Fuel introduced and has developed the use of LP-Gas by the growers and workers engaged in the area's winter crop production. During the festival Green's Fuel furnished the gas and equipment for the Ruskin Woman's Club restaurant.

A similar situation exists just a few miles from Ruskin in the section known as Plant City—a community famous for its strawberries. Like Ruskin, it holds an annual and increasingly popular festival, and as in Ruskin, Green's Fuel furnishes LP-Gas service to the growers there.

All fuel needs and all cooking equipment used at Ruskin are furnished by Green's Fuel. The company's president, K. H. Koach, counts it as part of Green's Fuel's positive program of growing with the communities it serves—and helping those communities to grow.



The display of Green's Fuel, Inc., at the Ruskin mid-winter Tomato Festival, Ruskin, Fla.

ate.  
asts  
dus-  
Fuel  
use  
ork-  
crop  
seen's  
equip-  
Club

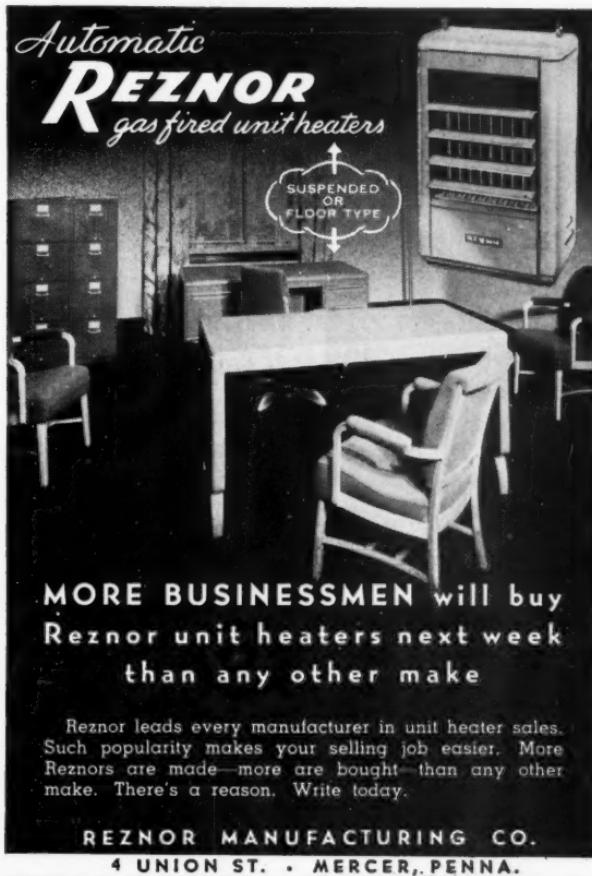
st a  
ection  
unity  
like  
in-  
as in  
LP-  
re.  
king  
furni-  
com-  
ounts  
itive  
com-  
those

Automatic

**REZNOR**

gas fired unit heaters

SUSPENDED  
OR  
FLOOR TYPE



MORE BUSINESSMEN will buy  
Reznor unit heaters next week  
than any other make

Reznor leads every manufacturer in unit heater sales.  
Such popularity makes your selling job easier. More  
Reznors are made—more are bought than any other  
make. There's a reason. Write today.

REZNOR MANUFACTURING CO.  
4 UNION ST. • MERCER, PENNA.

# PRODUCTS



## Domestic Range

Tappan Stove Co., 250 Wayne St.,  
Mansfield, Ohio.

**Model: D-71 and W-74.**

**Description:** These new lower-priced ranges are completely new and of original design. No part of them is carried over from the previous models. However, they include certain features formerly available only in the higher-priced models. Among these: cove top, Tappan "Visiguide" and "Visiminder"; and concealed oven venting. Both models are porcelain finished throughout, including the main back and base skirts.

Model D-71 is equipped with waist-high radiant broiler, conventional broiler below oven, and large-size baking oven. The smokeless broiler pan and grid are finished in chrome. The range is 40 in. long with a new

one-piece top valve panel. All four burners are equipped with simmer-set valves.

Model W-74 has two porcelain enamel ovens and two smokeless broilers equipped with chrome pans. This 40-in. range has a four-burner top and each burner is equipped with simmer-set valves.

Both models are available for use with LP-Gas.

## Control Valve

L. C. Roney, Inc., 1511 W. Florence Ave., Inglewood, Calif.

**Model: No. 1263.**

**Application:** This new valve is for Roney automatic cylinder charging manifolds and replaces No. 1260.

**Description:** The exterior appearance of the new control valve remains about the same, but the work-



BUTANE-PROPANE News

ing parts and liquid passages have been redesigned to provide greater capacity for faster filling of cylinders.

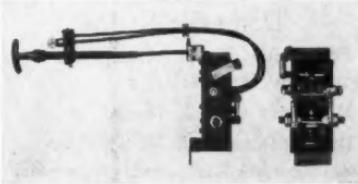
The valve stem travel has been increased to provide a full opening for the larger valve. The increase in stem movement has been made possible by the use of an "O" ring seal in place of the small diaphragm. Elimination of the small diaphragm reduces the pressure required to operate the control valve. Air or LP-Gas vapor at 35 psig will operate the valve, even with liquid pumping pressures in excess of 300 psig.

All new Roney automatic cylinder charging manifolds are equipped with the new No. 1263.

The new valves can be installed on manually controlled charging manifolds to convert them to automatic operation.

Improved "Heat-Seal" on oven and "Bar-B-Kewer" doors; white porcelain burner bowls; metalescent finish on all drawer interiors; aluminized vent boxes; oil-impregnated, sintered roller bearings on all drawers.

The Bar-B-Kewer is a separate radiant-heat oven for meat cookery. The "Hide-Away Grid-All" is for grilled specialties, such as fruit or onion rings, crepe suzettes, etc.



### Circuit Switch

Rochester Manufacturing Co., 17 Rockwood St., Rochester, N. Y.

**Model: "Mak-Saf" Circuit Switch.**

**Application:** Designed for automotive fire prevention, the switch prevents short circuit fires in motor vehicles.

**Description:** By pulling a handle located in a convenient position on the dashboard, an operator can immediately disconnect all electrical energy in a vehicle. A signal light system is in easy view of the operator, indicating any short circuit or electrical loss in the vehicle, thus catching a fire before it starts.

The Mak-Saf switch allows storage of motor vehicles with safety from fire hazards and battery discharges. According to the manufacturer, with the handle in operating position, it is impossible for unprotected wiring to start a fire or for a battery to discharge from short circuits.

The switch also permits motor re-



### Domestic Range

Estate Stove Co., Hamilton, Ohio.

**Model: 5000 Series.**

**Description:** Among features of the new Estate series are the following:

pairs to be made in safety from shock and flash fires.

It is sturdily made with heavy-duty copper contact plates which are said to be 100% larger than the contact plates now being used in starter switches. Positive contacts are assured by double compression springs of over 50 lbs. of pressure. The entire case is made in non-conductive material insulating all terminals.

### Domestic Range

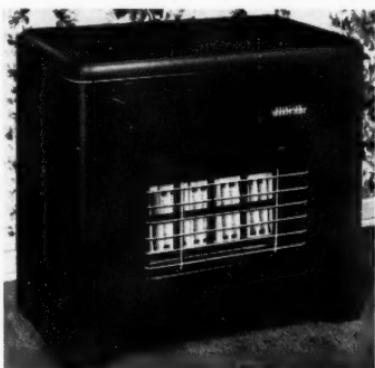
Perfection Stove Co., 7609 Platt Ave., Cleveland, Ohio.

**Model: No. 4025 Acorn.**

**Description:** This range is one of four new Acorn and four Oriole models. All new models have "super-centered" cooking tops with one giant and three standard size burners. All have banquet size ovens. Each range is equipped with an automatic surface burner lighter and the top, sides and front of each are finished in acid-resistant porcelain enamel.

No. 4025 has a waist-high smoke-

less broiler with chrome-plated grid. This 40-in. deluxe range has a storage drawer below the broiler and a convenient pull-out cooking chart. The range also features a light in the oven and a window in the door.



### Gas Heater

Stiglitz Furnace & Foundry Co., Louisville, Ky.

**Model: Stiglitz Warm-Aire No. 5-70.**

**Description:** This is one of a complete new line of gas heaters, including vented heaters with both console and "streamliner" cabinets in choices of radiant and louver fronts. Btu input ratings include 25,000, 40,000, 55,000, and 70,000.

All models have exclusive Stiglitz "Blue-Streak" burner and triple heat exchanger. Also included in the line are unvented heaters in all standard sizes and styles.



### Industrial Heating Catalog

A new eight-page bulletin has been published by Black, Sivalls & Bry-

son, Inc., Kansas City, Mo., describing a new heating unit that can be used interchangeably as a steam boiler or hot water heater by adapting the control equipment accordingly.

Designed primarily for smaller industrial requirements such as cleaning establishments and small factories, the heating unit is also suitable for heating commercial buildings, apartments, schools, swimming pools, and other installations.

The bulletin not only explains the design and functions of the heater but also illustrates BS&B's principle of internal firebox construction, noted for its rugged design and excellent performance. Drawings show recommended hook-ups for the unit as a 15-psi working pressure steam boiler and as a 40-psi working pressure hot water or fluid heater. Charts give capacities and specifications for the unit both as a boiler and as a heater.

The bulletin is available upon request to Black, Sivalls & Bryson, Inc., 720 Delaware, Kansas City.

### Fire Extinguisher Catalog

A colorful, new 20-page fire extinguisher catalog has been brought out by Ansul Chemical Co., manufacturers of dry chemical fire equipment.

The new catalog illustrates the complete Ansul line. Included are improved Ansul Model B extinguishers, piped systems, large stationary units, fire trucks, trailers, etc. The catalog also features charts showing characteristics of approved hand fire equipment and comparative effectiveness graphs.

It is available on request; Ansul Chemical Co., Marinette, Wis.

### Vaporizer Will Generate Fuel Gas From Crude Oil

To provide fuel for gas engines in regions where natural gas has become scarce or expensive, Black, Sivalls and Bryson, Inc., Kansas City, announces a simplified and compact unit to vaporize crude oil. It's a fuel vaporizer, a self-contained power source, that generates fuel gas from crude oil for use in gas engines. The BS&B fuel vaporizer, which is actually a miniature topping plant, is designed to fuel pipe line pumping engines and gas engine equipment on lease pumping jobs where gas is failing.

### Exhaust Heat Utilized

Exhaust heat from the engine, usually wasted, is used to heat the crude oil sufficiently to vaporize the lighter hydrocarbons — propane, benzene, naphtha and gasoline. These lighter hydrocarbons are passed to the engine as fuel in vapor form. Some gasoline vapors may be condensed from the generated gas and stored for starting the engine later.

Operating data on fuel vaporizers show a considerable saving in fuel expense after the installation of a fuel vaporizer in areas where natural gas has been purchased at a high price. The first unit to be installed was at Guernsey, Wyo., where a 300-horsepower unit generated gas to operate two 150-horsepower engines pumping 13,500 barrels of oil a day. The fuel cost dropped to \$240 a month from \$430 a month using purchased gas.

The BS&B fuel vaporizer is a "package" unit equipped with all necessary controls. It is insulated to prevent heat loss from the exhaust gas heater and the flash separator, both of which operate at high temperatures, and are built in four standard sizes of 20, 40, 110 and 300 horsepower.

# Will Use Propane as Solvent For Industrial Products

**L**IQUID propane will be the solvent used in an oil extracting plant which is nearing completion at Hammond, Ind., for Swift & Co., Chicago meat packers. Fats and oils of animal, vegetable and marine origin will be processed for recovery of chemical components useful as raw materials for manufacture of soaps, foods, paints, printing inks, pharmaceuticals and other commercial products.

Three separate units have been erected on a 7-acre site, each to handle a different type of oil. Employed in the process is a principle similar to that used in the "cracking" of crude petroleum oil in a fractioning column. The process, in which Swift & Co. claims to be pioneering, is simple, continuous and unique, it is said, in that it employs no temperatures as high as the boiling point of water. By the new method to be used in the plant, glyceride oils are separated into fractions differing in molecular weight and structure, as explained by the chemists.

## Public Gets Its First View

At last year's National Chemical Exposition in Chicago the newly developed process as used by Swift was shown for the first time in public, in a miniature educational exhibit. Prominent in the display was a simulated fractioning column carrying the oils in the propane solvent. A flow diagram, photographs and samples of raw materials and finished products were included.

Two of the many potential products of the process were presented

By H. H. SLAWSON

in detail to suggest the method and the wide variety of extractions possible. One traced production of Vitamin A concentrate from crude fish liver oil, while the other followed the fractionation of crude soybean oil. Although considerably simplified, these flow diagrams included all essential elements in the process.

By-products of the soybean oil "cracking" at different stages of the operation included such materials as oils for paints, oilcloth manufacture, printing inks, resins, shortening, margarine and salad oils.

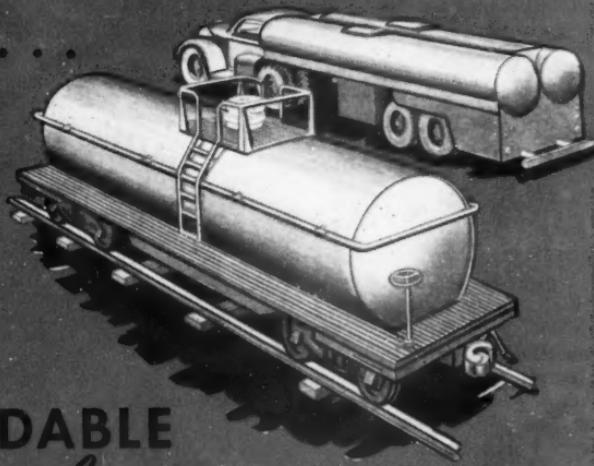
## Many Products Recovered

From the Vitamin A column came such items as oils for paints and leather manufacture, sulfonated oils and stearin for soaps and oil for shortening. From the destearinized oil came also oils for margarine and pharmaceutical preparations.

Liquid propane, as explained at the Chemical Exposition exhibit, is used as the solvent in these extractions. "By careful temperature control," it was stated, "the non-polar properties of propane can be regulated; thus wide variations in the solubilities of fats and oils in propane may be obtained. This precision control of physical conditions allows decolorization of fats and oils, preparation of paint oils from semi-drying oils, concentration of vitamin-containing oils and sepa-

butane - propane  
**DEPENDABILITY**

*means . . .*



**U P G**

**DEPENDABLE**

*supply . . .*

Diversified production from major LP-Gas manufacturer assures an ample supply to fill your needs even during seasonal emergencies.

**U P G**

**DEPENDABLE**

*delivery . . .*



United Petroleum Gas operates a large and highly efficient fleet of tank cars and trucks to deliver your LP-Gas requirement . . . where it's needed . . . when it's needed!

**UNITED PETROLEUM GAS COMPANY**

806 Andrus Building • Minneapolis 2, Minn.

and  
pos-  
Vita-  
fish  
d the  
oil.  
these  
ential

oil  
of the  
ls as  
ture,  
mar-

came  
and  
oils  
for  
nized  
and

at the  
used  
tions.  
," it  
erties  
wide  
fats  
ined.  
con-  
fats  
oils  
ation  
separa-

News

ration of refining oil from its crude stock."

The technique utilized in the new Swift plant is expected to lead to future development of other new oil products for industrial use. Improved quality of present products and better economies in processing of fats and oils are cited as still other advantages of the new process.

## Get New Prospects Through Old Customers

By JOE BAER

**Y**OU'VE heard of the old sales principle: Sell 'em and leave 'em.

Well, take it from C. L. Elliott, Jr., manager, Caldwell Gas and Equipment Co., Walsenburg, Colo., that this principle is all wet as far as LP-Gas dealers are concerned. It pays to call back on liquid gas appliance customers. For old customers carry seeds for more sales.

"Speaking of calling on old customers," said Mr. Elliott, "I make it a particular point to call on small merchants in our town who use LP-Gas systems. Here are fellows who deal with people all the time. What's more they're busy fellows. Time means something to them, and they know economy, too.

"When one of these merchants gets enthused about his liquid gas system—it's cleanliness, economy, and labor saving—he really talks it up," Mr. Elliott added.

"This enthusiasm is contagious. Often this fellow's customer will ask, where did you get your outfit? And the man will tell him. That's why it pays to visit this merchant. He, in turn," Mr. Elliott continued, "is apt to say, 'By the way, Mrs. Jones is right interested in a gas range. I



C. L. Elliott, Jr., manager Caldwell Gas & Equipment Co., Walsenburg, Colo., who specializes in selling from leads through old customers.

think she's ripe. Why don't you drop around and see her?"

Follow-up calls are paying dividends at Caldwell Gas. Last July, for example, appliance sales were running 50% ahead of the 1948 period.

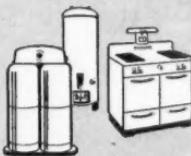
Three members of the Caldwell sales force—Mr. Elliott, C. D. Caldwell, company president, and Joe Strovas—also strike pay dirt by calling on home system users. A satisfied customer may himself be a prospect for another appliance. He may also give a salesman a live lead on a neighbor who admired his LP-Gas appliance.

At Caldwell Gas, each salesman carries tools which enable him to offer a customer quick service on repairs. Even as the salesman is doing some minor repairs, he is alert for possible leads.

Caldwell Gas salesmen follow this principle:

Every old customer carries the pollen which can germinate another sale.

# FOR DISTRIBUTOR, DEALER, AND MANUFACTURER



*The Only Complete L.P.-Gas Financing Service  
Specially Designed to Fit Your Needs*

## OUR CREDIT PLANS COVER THREE BASIC PROBLEMS:

- 1—**RETAIL INSTALLMENT FINANCING** of sales to gas consumers. LPG Credit Corporation will finance, in one package, the appliances, the lease fee (when container is leased) or the sale price of the complete installation (when sold outright), and the initial sale of gas for new installations.
- 2—**FLOOR PLAN** for financing inventories of appliances and containers which are purchased by the dealer for resale to customers.
- 3—**FINANCING OF CYLINDERS AND TANKS** for distributors and dealers leasing containers to retail customers.

### *Increase Your Sales—Use This Big Promotion Plan*

Sales helps including newspaper ad mats, direct mail, radio spot announcements, counter and window cards will be available to our clients at regular intervals.

*Inquire on your company letterhead*

## LPG CREDIT CORPORATION

312 EAST 131ST STREET, CLEVELAND 8, OHIO



## Limited Transport Facilities Retard Scotland Expansion

Shortage of delivery trucks is currently limiting the expansion of mobile gas systems in Scotland, according to the leading companies in that field. This is the latest of a series of shortages which have held up the growing volume of business handled by the mobile gas concerns whose activities now cover all Scotland.

The shortage of specialized equipment, designed to burn butane, has been overcome by manufacture of suitable designs. The container position is easier and deliveries to depots have been normal.

Labor is also again more plentiful and the butane industry is ready for expansion—but for its transport problems. And since transportation is a vital factor in this field, the shortage means a further period of marking time.

### Prevents Bulk Storage

Much the same problem has prevented development of storage facilities in Scotland, where one company planned to create a bulk storage plant from which containers could be refilled. This project also came up against a whole series of shortages which have prevented the execution of that plan to date. Despite all this, however, butane distributors are making a very substantial contribution to the development of rural life and industry.

One current activity, reported by Rural Gas Ltd., is the development of water heating facilities for dairying purposes. Increasing attention to dairying in Scotland has resulted in a similar demand for equipment and facilities which will satisfy public

health requirements. One essential is ready and ample supplies of hot water and butane supplies the answer.

This leading concern has now opened offices in Aberdeen and Dingwall and is expanding from Edinburgh. It is also very active in the west of Scotland and has now very complete national coverage.

### Industries Need Gas

Development of new "Industrial Estates" in Scotland has thrown a considerable volume of additional business and much major constructional work on Scottish gas companies. Because of the urgent need to develop these industrial estates they have been given a considerable degree of prosperity, but even this has not always helped to facilitate major schemes, especially when industrial estates coincide with individual industrial expansion, as in Lanarkshire.

Latest example of large scale development has been demonstrated in the Vale of Leven. There a major plant is presently being erected by Scottish Industrial Estates to house several important new industries. Gas services for this estate are in the hands of the Dumbarton gas department, thus following the normal practice of leaving this aspect of the estates construction to the local unit, which will also be responsible for its servicing.

In Lanarkshire, the county council is presently working one of the biggest schemes ever visualized in Scotland to feed the new estates there and at the same time meet new industrial commitments on a very large scale. These developments demonstrate the increasing importance of industrial gas in the new Scottish setup.

**1 HIGH QUALITY PRODUCT.**

Continuous research—rigid standards of production—guarantee quality, uniformity.

**2 DEPENDABLE SUPPLY.**

Prompt shipment by tank car or truck assures reliable delivery service, summer and winter!

**3 EXPERIENCED ENGINEERING.**

Competent advice on safe, efficient equipment design—for large or small plants.

# PHILLIPS

# 5-WAY

# PROFIT PLAN

Helps bulk plant operators make more money

**4 EFFECTIVE ADVERTISING**

Trained staff with practical marketing experience helps plan hard-selling advertising.

**5 OPERATIONAL ASSISTANCE.**

Specialists offer help on safety—sales—latest improvements—operating efficiency.

**PHILLIPS PETROLEUM COMPANY**  
PHILGAS DIVISION • SALES DEPARTMENT

BARTLESVILLE, OKLAHOMA

District offices in Amarillo, Tex.,  
Atlanta, Ga., Chicago, Ill., Denver, Colo.,  
Des Moines, Ia., Detroit, Mich.,  
Indianapolis, Ind., Jackson, Miss.,  
Kansas City, Mo., Milwaukee, Wis.,  
Minneapolis, Minn., New York, N. Y.,  
Raleigh, N. C., St. Louis, Mo.,  
Tulsa, Okla., Wichita, Kan.



## THE TRADE



JAS. R. LEE

With the trend toward greater concentration of business activities through the Federal Government, the Gas Appliance Manufacturers Assn., with headquarters in New York City, will expand the activities of its Washington office, H. Leigh Whitelaw, GAMA's managing director, has announced.

Leonard Macomber, GAMA Washington representative since 1943, retired on Jan. 1, 1950 and James R. Lee has been appointed as Washington representative for the association, with offices at 731 National Press Bldg., in Washington.

**H. O. Brumder**, 69 years old, president of Pressed Steel Tank Co., Milwaukee, Wis., died on Jan. 4 in Milwaukee. Mr. Brumder had been connected with the Milwaukee container concern for many years, becoming a director of the company in January, 1906. He had served as president of the company since February, 1923.

He guided Pressed Steel Tank Co. in its manufacture of Hackney cylinders, drums, barrels, kegs and special shapes for a quarter of a century of its most rapid growth. During the past few years, however, he was no longer active because of failing health.

Mr. Brumder was a well-known figure in Milwaukee industrial circles.

With the trend toward greater concentration of business activities through the Federal Government, the Gas Appliance Manufacturers Assn., with headquarters in New York City, will expand the activities of its Washington

In addition to his Pressed Steel Tank Co. connection, he was a director of the Wisconsin Motor Corp., Blackhawk Manufacturing Co., and North American Press.



J. D. SMETZER



J. D. BALDWIN

New executive appointments have been announced by Albert J. Weatherhead, Jr., president of **The Weatherhead Co.**, Cleveland, Ohio. John D. Smetzer, former industrial relations director, has been appointed vice president in charge of industrial relations. John D. Baldwin, Jr., has been made chief engineer and will supervise all development and product engineering activities of **The Weatherhead Company**.

Mr. Smetzer joined Weatherhead in 1927 and has advanced steadily through all departments in the plant.

Mr. Baldwin followed the footsteps of his father by joining **The Weatherhead Co.** 23 years ago as an engineer after attending Case Institute of Technology.



C. L. JAMESSON

appliance promotion division of Ketchum, MacLeod and Grove, Inc., in Pittsburgh and was previously associated with Sperry-Hutchison Co. He has had wide experience in the gas appliance field, and is well known to appliance dealers in the Pittsburgh area.

The kind of vision and cooperation which the gas industry needs was demonstrated recently at the Kutztown, Pa., Grange Hall where the Consumers Gas Co., of Reading, Pa., and the Natural Gas Co., of Lenhartsville-Douglassville, Pa., local LP-Gas distributor, cooperated in sponsoring a gas cooking demonstration.

Miss Fredaberyl Moyer, home service director, of Consumers Gas Co., and Mrs. Lillian Baldwin, former home service director, were the principal demonstrators. The cooking was done on the new "Ultramatic" CP Caloric gas range.

In spite of snow, 400 persons attended and every seat in the Grange Hall was taken. Free refreshments were served and those in attendance received a free cook book. A new Caloric gas range was raffled off.

**Selas Corp. of America**, heat processing engineers for industry, announces a change of address for the Chicago office. It is now located at 3857 W. Washington Blvd.

**Caloric Stove Corp.**, Philadelphia, has announced the appointment of Charlton L. Jamesson as district sales representative for the metropolitan Pittsburgh area.

Mr. Jamesson was formerly director of the gas

Election of H. E. Bramston-Cook as a vice president has been announced by Oronite Chemical Co., a Standard Oil Co. of California subsidiary.

Bramston-Cook will continue as Oronite's general manager of sales and product development work east of the Rockies, a position he has held for the past two years.

John Fry, president of the Detroit - Michigan Stove Co., announces the appointment of Otis R. Candler as vice president in charge of all manufacturing operations of the company.

Mr. Candler started with the company in 1926 as assistant superintendent. He was made factory manager in 1942 and supervised the record output of war material of the U. S. government in the company plant.



O. R. CANDLER



W. M. BARBER

Walter M. Barber, who has devoted 35 years to sales promotional activities, has been named sales promotion and advertising manager of Perfection Stove Co., a newly created post.

Since early 1942 Mr. Barber has been manager of Perfection's Cleveland district sales office. He first came to the company in

1915, to engage in sales promotional work. In 1917 he was named manager of the company's St. Louis district sales office.

In 1919 he went to Europe to act in a sales promotional and advertising capacity for the company. Under his direction the stove and heater department of Perfection's distributors in the United Kingdom was organized. He also introduced Perfection-made products into the Scandinavian countries.

In 1924, following several years residence abroad, Mr. Barber took a trip around the world, from New Zealand to Northern Manchuria, as a representative of his company. He introduced the Perfection name and products into such countries as India, Arabia, Palestine and Egypt.

J. M. Purdum, Perfection's assistant advertising manager for the past 4½ years, will continue in that post.



**H. L. SPENCER**

charge of manufacturing in all five Norge plants, according to the announcement.

Mr. Spencer rejoined Norge in 1948 after five years with Bendix Home Appliances, Inc., where he was vice president in charge of manufacturing.

Norge Division of the Borg-Warner Corp. will move its executive, administrative, sales, advertising and ac-

Announcement has been made by George P. F. Smith, president of Norge Division, Borg-Warner Corp., of the appointment of Harry L. Spencer to be vice president in charge of manufacturing and engineering.

He will have

counting departments—now located in Detroit—to Chicago during the summer of 1950, according to an announcement recently by George P. F. Smith, Norge president.

A large and attractive space on the second floor of the Merchandise Mart in Chicago has been leased where a permanent display of Norge appliances will be maintained in connection with the offices.

**A. J. Kerr**, vice president of Rockwell Manufacturing Co., has announced the appointment of R. V. "Bud" Burnette as supervisor of gas products for the Chicago, Columbus and Pittsburgh sales districts.



**R. V. BURNETTE**

Mr. Burnette was affiliated with Standard Steel Car Co. in Sharon, Pa., before joining the Pittsburgh Equitable Meter Co. in 1926. During the ensuing 23 years he held positions of junior engineer, gas sales engineer in the Chicago territory, sales supervisor for the Pittsburgh-DuBois Division of Rockwell, and more recently was attached to the Pittsburgh main office sales staff.

Mr. Burnette is a member of the Illinois Society of Professional Engineers.

**Servel, Inc.**, has been awarded a bronze "Oscar of Industry" trophy for the best 1948 annual report among leading household equipment manufacturers.

Each year "Financial World," investment and business weekly, pre-

sents the "Oscar" awards for the best annual reports in every phase of industry, including organizations in the United States, Canada and Latin America.

Servel, makers of the gas refrigerator, gas hot water heater, and gas air conditioning unit, was chosen to receive the "Oscar" by an independent board of judges. This is the ninth annual report survey conducted by the publication.

Dr. William R. Hainsworth, Servel vice president, accepted the award, as the company's representative, at the awards banquet held in New York City.

Substantial retail price reductions, greatly expanded advertising expenditures, production schedule increases, a large distributive organization increase, plus large scale gas utility cooperation are all cited by W. Paul Jones, president of Servel, Inc., as reasons why his company expects 50% more sales in 1950.

These optimistic statements by Servel's president were made to more than 600 distributors, gas utility executives, and Servel management who recently met in Chicago.

The predictions came as opening blasts in a full scale sales campaign to put the manufacturers of the gas refrigerator in a leading position in domestic refrigeration sales.

"For Servel and practically every company in the appliance industry the year 1949 was a year of awakening," Mr. Jones said. "A slipping sales graph has pointed toward the need for the type of planning which will result in increased sales during 1950. In spite of rising costs for steel and other basic commodities from which the Servel gas refrigerator is manufactured, we are substantially reducing prices on all of our new models."



W. N. RAST



J. P. CAIN

J. N. Crawford, director of sales of **Bryant Heater Division, Affiliated Gas Equipment, Inc.**, recently announced the appointment of W. Ned Rast and Joseph P. Cain as manager and assistant manager respectively of the company's branch office in Dallas, Texas.



H. M. REEVES

Herbert M. Reeves, chief engineer of the **Florence Stove Co.'s Kankakee plant**, has been promoted to the newly created position of director of product engineering, according to an announcement by Florence president Robert H. Taylor. In his new position, Mr. Reeves will be responsible for all research, development, and new product engineering for the three Florence plants at Kankakee, Ill., Gardner, Mass., and Lewisburg, Tenn.

Mr. Reeves is especially well qualified for his new post by reason of his training and long experience. For nearly 15 years he has been chief en-



"The THRIFTY buy in '50"

**CHILL CHEST**

OFFERS...

**LARGER CAPACITY**

*in less space*

**LOWER PRICE**

*per cubic foot*

The 8, 15 and 23 cubic foot CHILL CHESTS . . . advanced in design and engineering features . . . give big food storage capacity. They are no larger outside than most 6, 12 and 20 cubic foot freezer cabinets. Priced to compete with these smaller sizes, CHILL CHEST gives you a distinct sales advantage — Lower Price per cubic foot!

Get the details NOW about the 1950 CHILL CHEST Program.

WIRE, PHONE OR WRITE

**REVCO, INC.**

DEERFIELD, MICH.



Engineer at the local factory, during which time he has developed many new improvements and engineering advancements in Florence products.



E. J. McKEEVER

For the past 10 years, Mr. McKeever has been with the Brooklyn Union Gas Co., for the past four and one-half as a commercial representative.

He will call on dealers in Metropolitan New York, New Jersey, Delaware, Eastern Pennsylvania, Maryland and Washington, D. C.

The appointment of Walter B. Morris of Elizabethtown, Ky., as "Janitrol" sales representative for the state of Kentucky, is announced by H. C. Gurney, sales manager of the Janitrol domestic-commercial heating division, Surface Combustion Corp., Toledo, Ohio.

Previous to owning and operating the Elizabethtown Heating and Ventilating Co. for the past four years, Mr. Morris served two and a half years as a field engineer for Surface Combustion.

The new Canadian factory of the Ruud Manufacturing Co. in the Mimico district of Toronto, Ontario, was opened in December and is now in

# You can make more Sales with the **EMPIRE** Line

*America's Largest Selling Gas Floor Furnace*

Superior Performance of **EMPIRE** Gas Floor Furnaces makes them first choice to heat with Gas. The exclusive "Thriftmatic" gas burner used in their operation gives more efficiency, — maximum heating results with low gas consumption. Scientific construction with finest materials provides long life, — safe operation and complete customer satisfaction. You can build for profitable business in offering your customers these fine appliances.



## The **EMPIRE** De Luxe

Built in several suitable sizes. Meets requirements for years of carefree heating service. The demand has been constantly increasing from coast to coast because of the better **EMPIRE** engineering.

## The **EMPIRE** "Lo-Boy"

Built for low initial cost where only a small heating unit is needed. Operates with the exclusive Thriftmatic burner. Enables you to meet price competition at a profit.

Lowest  
gas Floor  
Furnace

**EMPIRE**

See The **EMPIRE** Representative in Your Territory or Write Us Direct

**STOVE CO., BELLEVILLE, ILLINOIS**

MANUFACTURERS OF GAS HEATING AND COOKING APPLIANCES

# ATTENTION RETAILERS

- 
- 
- 
- 
- 

Get your copy of the new Color-Brochure parading the **BRILLIANT FIRE** Gas Heater line for 1950...

- 
- New Features
- New Deluxe Finishes
- New Budget Models
- 

Remember, **BRILLIANT FIRE** is the complete line...from small Utility models to apartment size Winter Air Conditioners.

- 

## **BRILLIANT FIRE HEATERS for All Gases**

*Write Today*



**The OHIO FOUNDRY & MFG. CO.**  
Engineers • Manufacturers • Designers  
STEUBENVILLE • OHIO • U.S.A.

production, it has been announced by R. H. Lewis, Ruud president in Pittsburgh.

The new plant will have twice the floor space of the old Toronto factory, which has been in continuous operation for over 40 years as a direct operation of the Pittsburgh company.



**E. C. BLOMQUIST**

West Virginia, and the eastern section of New York and Pennsylvania. Mr. Blomquist will manage sales and promotion for Rimco hoods in this area.

Mr. Blomquist was formerly associated in an executive and sales capacity with J. I. Case, manufacturers of farm machinery.

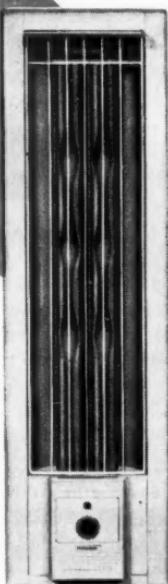
The election of Jacob Morrison to the chairmanship of the board of directors and of Samuel Morrison to the presidency of **Morrison Steel Products, Inc.**, Buffalo, is announced.

Mr. Morrison, who founded Morrison Steel Products in 1912, has been its president since its incorporation in 1920. He has been executive vice president for the past 10 years. Following his graduation from Syracuse University in 1929, he worked in every department of the factory and later entered the sales promotion division. Gradually assuming administrative and executive duties, he was given charge of all activities in the contract

there's a **PLUS VALUE**  
in **PANELRAY Infra-Red**  
...heats adjacent rooms too!

PANELRAY infra-red rays provide a new type of instantaneous heat that warms in delightful head-to-toe comfort. Directed at body height — the heat zone is the living zone and you substitute *warm floors* for hot ceilings. PANELRAY infra-red rays travel in a straight line and are sent out in all directions. Not diverted by drafts, these healthful infra-red rays eliminate "cold spots" and the entire area becomes speedily and comfortably warm.

But that's not all. Here's the "plus." PANELRAY warmed air circulates throughout the home — and B.T.U. for B.T.U. of input, *heats adjacent rooms as well as any of the old-fashioned warm air heaters*. Line up with the swing toward this new kind of heat. Sell PANELRAY and the plus value it delivers. In satisfaction and sales, you too, will find it to be — "The Line of Least Resistance."



Illustrated is **PANELRAY** wall type unit. Single or dual installation.

**PANELRAY** Type "F." Floor type, installs anywhere. Vented or non-vented as desired.

**DAY & NIGHT DIVISION**  
Affiliated Gas Equipment, Inc.  
Monrovia, Calif.



**DAY & NIGHT**

"The Line of Least Resistance"

**CLIP AND MAIL!**

Day & Night Division — Affiliated Gas Equipment Inc., Monrovia, Calif.

Please send literature on

**PANELRAY**    **PANELRAY "F"**

NAME \_\_\_\_\_

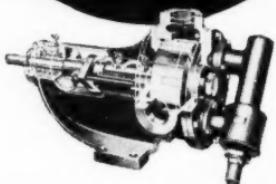
ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ ZONE \_\_\_\_\_ STATE \_\_\_\_\_

# VIKING

## LP GAS PUMPS

Are Economical  
TO BUY...TO USE  
TO INSTALL  
TO SERVICE



The original cost of Viking pumps is surprisingly low for the work they are built to do.

Installation cost is away down. Their simplicity and adaptability lend themselves readily to quick and easy installation.

Power requirements are exceptionally low. Long, dependable life assures economical use.

Simplicity of parts makes easy servicing after long usage or hard service.

Ask for the genuine Viking when in need of L-P gas pumps. Be sure . . . be safe with original Viking pumps . . . continuously built, sold and serviced for 33 years. Ask for free bulletin 2300B today.



**VIKING**  
PUMP COMPANY  
Cedar Falls, Iowa

See Our  
Catalog In  
SWEETS

stamping division, a function which he still retains.

Other organizational changes announced were the appointment of Norman H. Siegel as chief engineer and of Roy C. Timm as director of quality control.

Francis James Hood, president of Ansul Chemical Co., died suddenly Nov. 10 while on a business trip in New York City. He was 44 years old.

Mr. Hood was elected to the presidency of his company less than a year and a half ago. Before that, he had served as vice president, secretary-treasurer and originally, California representative.

Robert C. Hood has been elected president of the Ansul company to succeed his brother. The 32-year-old new president had been named vice president less than two years ago.

Ansul also created a dual vice presidency. Sales director Leonard C. McKesson was named vice president in charge of sales and Arthur C. Pope was elevated to vice president in charge of manufacturing.

The company has elected four new directors. They are: Mr. McKesson, Mr. Pope, Stanley R. Holmquist, treasurer, and A. J. Whitford, president of the First National Bank of Marinette, Wis.

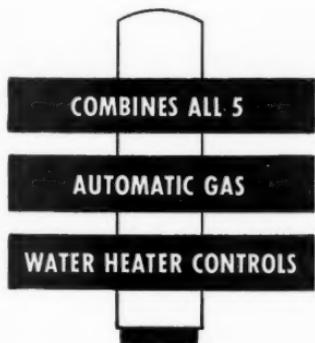
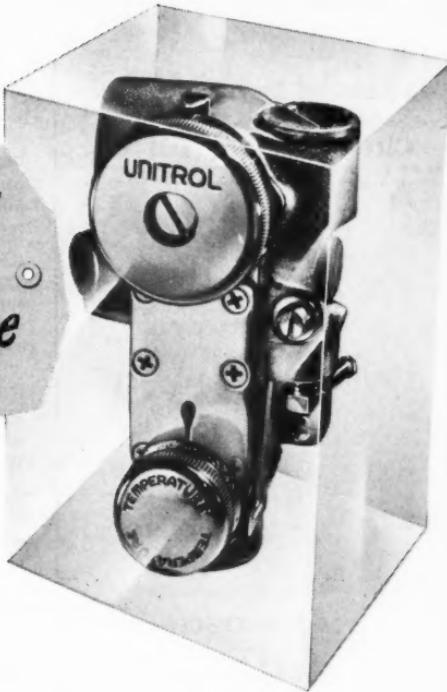
Cities Service Oil Co. (Del.) has completed modernization and expansion of its natural gasoline plant at



ROBT. C. HOOD

*Everything's under Control  
in One  
Complete Package*

by  
Robertshaw  
Grayson



1. Main Gas Cock with Flow Adjustment
2. Thermo-magnetic Automatic 100% Safety Pilot
3. Snap Action Thermostat
4. Pilot Valve and Pilot Adjustment Valve
5. Filter for Pilot Gas



In home and industry... **EVERYTHING'S UNDER CONTROL**



**Robertshaw-Fulton**  
CONTROLS COMPANY  
GREENSBURG, PENNSYLVANIA

ROBERTSHAW THERMOSTAT DIVISION, Youngwood, Pennsylvania • FULTON SYLPHON DIVISION, Knoxville, Tennessee • GRAYSON CONTROLS DIVISION, Lynwood, California • AMERICAN THERMOMETER DIVISION, St. Louis, Mo. • BRIDGEPORT THERMOSTAT DIVISION, Bridgeport, Conn.

## **Liquefied Petroleum Gas**

### **Cities Service Oil Co.**

A DEPENDABLE SOURCE  
UNIFORM PRODUCTS  
A CAPABLE SUPPLIER  
TWENTY YEARS' EXPERIENCE

### **IN LP GAS ALSO**

CITIES SERVICE  
MEANS  
GOOD SERVICE

### **CITIES SERVICE OIL CO. (Del.)**

BARTLESVILLE, OKLA.  
CHICAGO, ILL.

#### **Other Sales Offices**

Cleveland  
St. Paul

Kansas City  
Toronto

Pampa, Texas. New facilities of the plant were placed in operation recently, according to an announcement by the company.

The expanded Pampa plant has been designed to eventually process 18,000,000 cubic feet of gas daily and will produce approximately 60,000 gallons of liquid products daily. Of this amount, approximately 35,000 gallons is natural gasoline and butane, and the remaining 25,000 gallons is propane.

The appointment of Robert W. Cleveland as sales engineer for the F. J. Evans Engineering Co., Birmingham, Ala., is announced by F. J. Evans, president

Mr. Cleveland, who will be located in the Atlanta office, will specialize in the engineering and sale of "Janitrol" gas fired space heating equipment, manufactured by Surface Combustion Corp., Toledo, Ohio.

Appointment of Robert C. Overmyer as advertising manager of the "South Wind" division of Stewart-Warner Corp. at Indianapolis has been announced by Fred Cross, corporation director of advertising.

Mr. Overmyer will handle trade and consumer advertising and sales promotion duties in connection with military, aircraft and home heating equipment produced in the Indianapolis plant, Mr. Cross said. His headquarters will be at Indianapolis.

**Temco, Inc.**, is the new name adopted by the firm formerly known as Tennessee Enamel Manufacturing Co., according to W. B. Evans, president.

Organized in 1921 by Malvern H. Wright, now retired, and B. Bratten Evans, the company's major pro-

## Partial List of Contents

WHAT IS PROPANE? — Supply. Properties. Definitions.

THE BEHAVIOR OF GASES — Pressure. Specific Gravity. Density. Compression.

WHAT GOES ON IN A PROPANE CYLINDER? — Construction. Filling.

THE SIMPLE REGULATOR — Design. Problems and Cures.

REGULATOR MANIFOLDS — Service Problems. Multiple Installations.

REGULATIONS — Equipment Selection and Installation. Domestic. Industrial. Safety.

BURNER DESIGN AND APPLICATION — Ports. Orifices. Burner Installation.

APPLIANCE CONVERSIONS — Inputs for Domestic, Commercial and Industrial Burners.

FACTS ABOUT WATER AND WATER HEATERS — The Effects of Water on Heaters. Usage Tables.

TYPES OF WATER HEATERS — Installation. Safety Devices. Efficiency.

## DEALERS, SALESMEN, SERVICEMEN

Are you closing the door to future sales by giving incomplete answers to your prospect's questions? Can you compare butane-propane costs and safety with electricity in your area?

BUILD YOUR FUTURE EARNINGS BY LEARNING THE FACTS TODAY. The Bottled Gas Manual provides 352 pages of easy-to-read information on selling and servicing LP-Gas and appliances.

### Order Your Copy Today

Price is \$4.00 per copy. We pay postage on orders accompanied by check or money order. In Calif. add 15c for sales tax.

### BUTANE-PROPANE News

198 S. Alvarado, Los Angeles 4, Calif.

LP-GAS PIPE LINES — Friction. Sizes. Formulas. Charts.

TESTING FOR LEAKS AND ADJUSTING BURNERS — Flame Characteristics. Servicing.

FUNDAMENTALS OF THERMOSTATS — Types. Service. Expansion of matter under heat.

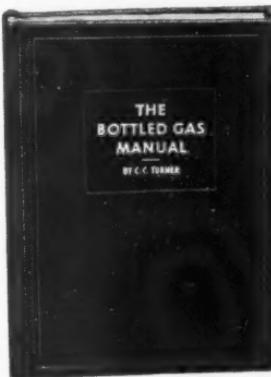
PILOTS AND PILOT CONTROLS — Types. Causes of Failure. Adjustment. Safety Pilots.

BURNER DESIGN AND APPLICATION — Ports. Orifices. Burner Installation.

APPLIANCE CONVERSIONS — Inputs for Domestic, Commercial and Industrial Burners.

FACTS ABOUT WATER AND WATER HEATERS — The Effects of Water on Heaters. Usage Tables.

TYPES OF WATER HEATERS — Installation. Safety Devices. Efficiency.



## THE BOTTLED GAS MANUAL

SELECTING AND INSTALLING WATER HEATERS — Demand Analysis. High Bill Complaints. Service Problems. Peak Demands.

COMPETITIVE FUELS — WOOD, COAL, OIL. Heat Content. Efficiency. Competitive Figures.

COMPETITIVE FUELS — ELECTRICITY — Rates and Refrigeration. Meeting Electrical Competition.

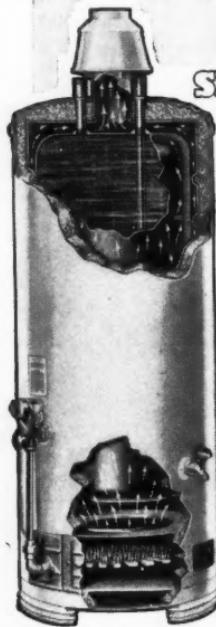
COMPETITIVE FUELS — ELECTRICITY — COOKING AND WATER HEATING — Operating Costs. Fire Hazards. Relative Merits.

GAS LIGHTING — Law Governing Transmission of Light. Relative Costs. Value to Industry.

SPACE HEATING — Estimated Requirements. Proper Sizes. Types of Heating Equipment.

THE TOOLS OF OUR PROFESSION

# New... INSIDE and OUT



- 
- COMPLETELY AUTOMATIC**
- 
- UNDERFIRED**
- 
- FIBERGLAS INSULATED**
- 
- ECONOMICAL OPERATION**
- 
- LONG LIFE**

Yes . . . and it's that Security Quality that has made so many water heater prospects SECURITY owners! Finest materials and skilled workmanship mean dependable performance. These big HEAVY DUTY heaters are smartly styled. And thousands of owners are amazed at their efficiency, economy and long life.

Built to burn ALL GASES. Now is the time to assure yourself a steady . . . and satisfied . . . flow of customers. Build your sales on SECURITY . . . and profit!

**SECURITY MFG. CO.**  
1630-48 Oakland Ave., Kansas City 3, Mo.

## **SECURITY** **HEAVY-DUTY** **WATER** **HEATERS**



duction consisted of job enameling work. Success and expansion have characterized the growth of Temco and today Temco is one of America's large producers of gas appliances. Over a million home heating units have been produced.

The Temco management group consists of W. B. Evans, president; F. Donald Hart, executive vice president; L. E. Nordholt, vice president in charge of engineering; Robert N. Smith, secretary-treasurer, and Frank Drake, sales manager.

President Henry Honer has recently announced the appointment of Lloyd C. Ginn as **Western Stove Co.**'s general sales manager, with headquarters in Culver City, Calif.

Mr. Ginn was for 26 years with the American Stove Co. and a member of its board of directors. From a billing clerk in 1923 to advertising and sales promotion manager is his success story with "Magic Chef." He is thoroughly acquainted with both the gas range field and the gas industry as a whole, having served on many of the executive committees of the American Gas Assn., the Gas Appliance Manufacturer Assn. and the Liquefied Petroleum Gas Assn.

James A. Norris has been appointed general sales manager of the brass division of Kerotest Manufacturing Co., according to S. J. Roush, Kerotest president. He will be in charge of all the company's brass valve and fitting sales, including refrigeration and liquefied petroleum gas products and compressed gas cylinder valves.

Mr. Norris joined Kerotest in 1945, and has been serving as West Coast district manager with headquarters in Los Angeles. He will now be in the company's Pittsburgh offices.

**Stacey-Dresser Engineering Division**, Cleveland, Ohio, is in the process of moving its headquarters to Cincinnati, according to an announcement made recently by H. N. Mallon, president of Dresser Industries, Inc.

E. A. Flaschar, general manager of Stacey-Dresser, will direct the coordination of the activities of his organization with those of its parent company, Stacey Bros. Gas Construction Co., a subsidiary of Dresser Industries.

All matters pertaining to "Ko-Z-Aire" furnaces have been turned over to the manufacturing plant at Red Oak, Iowa, it was announced recently by Jones & Brown, Inc., national distributors of the product.

This changeover became effective as of Jan. 1 and became necessary in order to handle more efficiently the

volume of business that has developed on Ko-Z-Aire furnaces over the past year.

Jack Hildebidle, general manager of the plant at Red Oak, Iowa, will handle all sales, production and administration departments, under the guidance of the Jones & Brown organization.

**The Murray Corp. of America**, Scranton, Pa., steel fabricators and large producers of automotive bodies, will enter into the national distribution of moderate priced home appliances early in 1950, according to B. C. Gould, president.

Among appliances to be manufactured will be gas and electric ranges.

Milton W. Heath, president and general manager of **Heath Tree Service Inc.**, Wellesley, Mass., announces



## BUTANE - PROPANE

Burning Oil • Tanks •

We can deliver fast because we have our own tank cars, and transport trucks.

Sources of supply in these areas:

KANSAS—six  
OKLAHOMA—twelve  
TEXAS—four  
NEW MEXICO—four



Bottles • and Equipment

Transport trucks stationed at Great Bend, Kans. (Phone 6332); Seminole, Okla. (Phone 87) and Tulsa, Okla. (Phone 4-8700).

Company operated bulk plants at Great Bend, Stockton, Kans. and Tulsa, Okla.

Co-owned dealer operated bulk plants (Monarch Butane Company) Reserve, Kans.; Master Gas Company, Salem, Mo.

R. J.  
TULSA, OKLAHOMA

# Allison CO.

# NEW!

## NOW L-P EQUIPMENT THAT SELLS ITSELF!



Here it is, a new merchandising idea by Weldit, a plan that will make more profits for you.

An attractive, self-merchandising, multi-colored counter or wall display unit, equipped with quick release mountings, complete with the following Weldit Torches:

(1) C-48-P. Weldit Full Weldimatic Trigger Control Torch. (L-P gas and atmospheric air.) Adjustable pilot light, needle valve adjustment. For heating, soldering and yes, even chicken singeing.

(1) C-48-WP. Weldit Torch Same as above, only non-automatic.

(1) No. 484 Large Burner L-P.

(1) C-48-B. Weldimatic Torch with No. 470 Burner. Uses propane gas and atmospheric air, provides flame 3" wide at 35 lbs. pressure for paint removal from wood or metal. A hot sales number.

(1) No. 4826-D. Safety Check Tank Connection. Shuts off gas flow if hose becomes ruptured or disconnected when tank is open. 12 ft. of Hose included with unit.

Each of the above items can be replaced — just reorder by number on the torch.

Remember, all Weldit L-P Torches are designed to operate at full tank pressure adjusted at torch valve (no regulator is needed). Each Weldit Torch is equipped with a filter device that eliminates foreign matter.

This is your big opportunity to cash in on greater torch sales. There is a huge market for L-P Torches and if you display them, you will sell them.

Cash in on this plan. Order your self-merchandising display board unit today at this special price — \$35.00, retails for \$60.00!

**Weldit**  
INC  
SINCE 1918

994 OAKMAN BLVD. DETROIT 6, MICH.

the following promotions in his gas leak location organization:

Charles A. Heath, who has been operations supervisor, is now vice president in charge of operations.

George A. Muldoon, who was first employed by the company as chief accountant and later made office manager, has been elected assistant treasurer. Mr. Muldoon is located at the headquarters office of the company in Wellesley, Mass., where he will continue in both of the above capacities.



**J. W. NORTHCUTT**  
new district office in Columbus.

Prior to his present assignment, Mr. Northcutt handled all major oil and engineering company accounts in the Houston district.

Mr. Moore is a graduate engineer of Washington and Lee University. He became Atlanta district manager in 1943 and held this position until his transfer to the Columbus district office.

**John A. Fry**, president of **Detroit-Michigan Stove Co.**, has just announced the following appointments in that organization's executive sales staff:

L. E. Clancy has been appointed director of sales. He was formerly sales manager of the company's Garland commercial range division, and

# NEW! Peerless

CIRCULATORS — RADIANT HEATERS  
UNIT HEATERS — FAN CIRCULATORS

A.G.A. APPROVED FOR ALL GASES

**NEW!** 1950 MODELS **NEW!** SMOOTH FINISHES

**NEW!** eye appealing smart designs

**NEW!** quiet forced air circulation

**NEW!** positive automatic controls

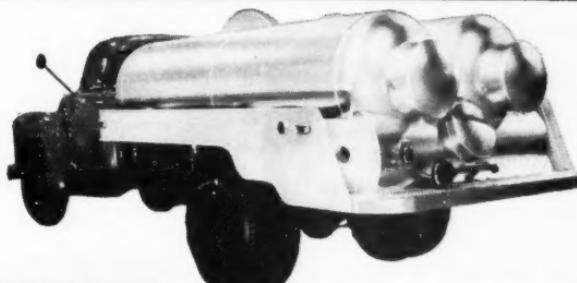
**NEW!** seam welded gas tight heating sections

**NEW!** striking finishes — longer life construction

*Styled to Sell — Built to Satisfy — Made to Last*

Get ready NOW for 1950's best selling high profit line.  
New literature available soon . . . write for yours today.

**PEERLESS MANUFACTURING CORP., LOUISVILLE 10, KY.**



**Standard Model  
Twin-Barrel  
Truck Unit**

- An unusually well balanced, light weight, low centered assembly, low in cost. Arranged for full visibility to the rear. Rear deck bumper assembly is heavy and rugged. Tanks are heavily under-coated and painted with fast drying aluminum paint.

*Specifications: 1206 Gallons  
U-69 or U-201 Construction*

MOTOR FUEL TANKS • DOMESTIC TANKS • SPHERES • STORAGE  
ANHYDROUS AMMONIA TANKS • TRAC-TOR CUSTOM TANKS

**North Texas Tank Co.**

P. O. Box 519 • Phone 146  
DENTON, TEXAS

# The line of Least Resistance!

**PREMIER**  
Since  
1912



The new, complete line of 38", 30" and 21" Premier Gas Ranges puts profit in your pocket. They're tops in popularity, too—with all the "most-wanted" customer-winning features. You'll profit with Premier. Feature the complete line—all A. G. A. approved.

SEND FOR  
COMPLETE CATALOG

# Premier

STOVE COMPANY

100 South Sixteenth Street

Belleville, Illinois



PAUL INSKEEP



L. E. CLANCY

prior to that was advertising and sales promotion manager of the company for several years. He has been associated with the Detroit-Michigan Stove Co. for 25 years.

Paul Inskeep, a 10-year veteran with the company, is now sales manager of domestic ranges. Mr. Inskeep was formerly central division sales manager and has spent a quarter of a century in the appliance business.



PAUL KENNEDY

John K. Knighton, general sales manager of Servel, Inc., of Evansville, Ind., has announced the appointment of Paul Kennedy as director of retail sales development for the company. Mr. Kennedy has been handling Servel's training and selection program as a part of the company's advertising and sales promotion department.

This new department will be responsible for the development of creative retail sales methods, procedures for hiring and training of retail

# Butane & Propane

Carter

Producers of high quality  
Liquefied Petroleum Gases Since 1931  
Wholesale Only

**THE CARTER OIL COMPANY**  
TULSA, OKLAHOMA

**BUTANE-PROPANE**  
*News*



Standard Rates Apply to U. S.  
& Possessions, Canada, Mexico,  
Cuba, South and Central Amer-  
ican Countries.

All others.....1 year 3.00

**CLIP THIS AND MAIL TODAY**

*if you are not a subscriber to*

**BUTANE-PROPANE NEWS**

198 S. Alvarado St., Los Angeles 4, Calif.

**SUBSCRIPTION ORDER**

Enter my subscription to BUTANE-PROPANE  
NEWS to begin with the next issue.

1 year \$2.00       3 years \$5.00

2 years \$3.50

Check enclosed

Please bill me

In the U. S. Only

One Year Via Airmail \$8

NAME \_\_\_\_\_ POSITION \_\_\_\_\_

COMPANY \_\_\_\_\_

STREET

CITY

ZONE

STATE

